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HISTORY OF MEDICINE IN MASSACHUSETTS

SAMUEL A. GREEN

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HISTORY OF MEDICINE
IN MASSACHUSETTS.

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History of Medicine in Massachusetts.

A

CENTENNIAL ADDRESS

DELIVERED BEFORE

THE MASSACHUSETTS MEDICAL SOCIETY

AT CAMBRIDGE,

JUNE 7, 1881.

BY

SAMUEL ABBOTT GREEN, M.D.

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TO

The Memory of

DOCTOR JOSHUA GREEN,
OF GROTON,

WHO WAS, DURING HALF A CENTURY, A MEMBER OF THE

Massachusetts Medical Society,

AND FOR MANY YEARS ONE OF ITS COUNCILLORS,

THIS ADDRESS IS INSCRIBED, WITH FILIAL PIETY,

BY HIS SON.

A small edition of this Address was printed before its delivery, for the convenience of the writer; though in its present form some changes have since been made. It was delivered in the Sanders Theatre, when parts of it were necessarily omitted on account of its length.

CENTENNIAL ADDRESS.

I.

THE MASSACHUSETTS MEDICAL SOCIETY is about to enter upon the second century of its existence. Following the custom of this centennial period, it proposes to celebrate the anniversary of its origin by the story of its life. It was born in troublous times ; and its founders were still engaged more or less actively in a political struggle which even to-day, by reflex action, is exerting a powerful influence on the events of the world. It was during the War for Independence that the physicians and surgeons of this Commonwealth were led to feel the need of some association in order to encourage professional studies. A new field was then opened for medical investigations, and the workers were eager to cultivate it. At no previous time had so many medical men of the State been brought into close relations with one another, or in contact with their brethren from other States ; and this intercourse necessarily stimulated inquiry and discussion, and produced a community of professional feeling, such as had never before existed. In union there is strength ; this was true in war, and it was true in peace.

They saw that better results were accomplished by concerted action than by individual effort; and they were then ready to associate themselves together for the purpose of improving the practice and raising the standard of its study. It is a singular fact in the social economy of affairs, that some of the oldest and most learned scientific associations, both in this country and in Europe, have been formed during the clash of arms and the din of war; and this Society is no exception. Nothing happens in this world by chance, though oftentimes it may be difficult to discover the law which underlies a principle.

The Massachusetts Medical Society was incorporated on November 1, 1781, and its charter was signed by Samuel Adams, as president of the Senate, and by John Hancock, as governor of the Commonwealth. These patriotic names suggest Revolutionary times. It will be noted that the centennial anniversary of the birth of the Society does not occur for some months to come; but it is fair to assume that the preliminary steps for its organization cover this interval. In the presence of this audience it need not be said that a period of gestation always precedes a birth; and without attempting to fix the limit of this period I shall assume that it is now a century since the conception of the Society took place in the brains of its founders.

There had been before this time a medical society in Boston, which was the first one formed in America. It appears to have been in existence as early as the year 1735, though it did not continue

long. Its records are irretrievably lost, and all that is known about it is gathered from fragmentary sources. It is very likely that it included in its list of members some of the ministers, as they were interested in the study and practice of medicine. Dr. William Douglass, a noted author and physician of that day, writes, under date of February 18, 1735-36, to Cadwallader Colden, of New York, that

... We have lately in Boston formed a medical society, of which, this gentleman [Dr. Clark, the bearer of the letter], a member thereof, can give you a particular account. We design from time to time to publish some short pieces; there is now ready for the press number one, with this title-page:—

NUMBER ONE,
MEDICAL MEMOIRS
CONTAINING

1. A miscellany. Practical introduction.
2. A history of the dysentery epidemical in Boston in 1734.
3. Some account of a gutta-serena in a young woman.
4. The anatomical inspection of a spina ventosa in the vertebrae of the loins in a young man.
5. Some practical comments or remarks on the writings of Dr. Thomas Sydenham.

Published by a Medical-Society in Boston, New-England.

This letter is now among the Colden Papers, in the possession of the New York Historical Society; a copy of it is printed in the second volume, fourth series, of the Massachusetts Historical Collections (pages 188, 189).

Gutta serena, Englished into drop serene, was the cause of Milton's blindness. The poet alludes to himself, when he says:—

“Eyes that roll in vain
To find thy piercing ray, and find no dawn;
So thick a drop serene hath quenched their orbs.”

The disease was afterwards known as amaurosis. Spina ventosa is an affection of the osseous system,—according to old notions,—in which the texture of the bone dilates, seemingly distended with air.

The first number of these "Medical Memoirs" was never printed. It was probably Dr. John Clark, at that time an eminent practitioner of medicine, who is referred to in the letter, as a member of the Society. He was born on December 15, 1698, and was then at the height of his professional zeal, when he would naturally be interested in a scientific association. He belonged to a family of medical antecedents and traditions, being himself of the fourth generation in a direct line of John Clarks, all physicians, and he was followed by three more, equally direct, of John Clarks, these three also physicians,—covering a period of more than a century and a half and including seven generations of the same name.

During the year 1736, Dr. Douglass published a pamphlet entitled "The Practical HISTORY of a New Epidemical Eruptive Miliary Fever, with an Angina Ulcusculosa which prevailed in *Boston* New England in the years 1735 and 1736." It is inscribed, "To a Medical Society in *Boston*," and the preface begins :—

" Gentlemen, *This Piece of Medical History does naturally address it self to you, considering that I have the pleasure of being one of your number, that you have been fellow labourers in the management of this distemper, and therefore competent judges of this performance, and that where difficult or extraordinary Cases have occurred in any of your private practice, I*

was favoured to visit the Patients in order to make a minute Clinical enquiry: in short, without your assistance this piece would have been less perfect, and not so well vouch'd."

In "The Boston Weekly News-Letter," January 5, 1737, there is a long communication, addressed "To the Judicious and Learned President and Members of the *Medical Society* in *Boston*," and signed "*Philanthropos*." It takes strong ground in favor of regulating the practice of physic throughout the province, and advocates the plan of having all practitioners examined by a board of physicians and surgeons appointed by the General Court. The writer is justly severe on the "*Shoemakers, Weavers and Almanack-makers*, with their virtuous Consorts, who have laid aside the proper Business of their Lives, to turn Quacks."

In the same newspaper of November 13, 1741, is an interesting report of a surgical operation performed about that time for urinary calculus, on Joseph Baker, a boy six years old. It was done "in Presence of the Medical Society," by Dr. Sylvester Gardiner, and "according to Mr. *Cheselden's* late Improvement of the *lateral Way*." The report begins:—

"A Medical Society in Boston New-England, with no quackish View, as is the manner of some; but for the Comfort and Benefit of the unhappy and miserable Sufferers by the excruciating Pain, occasioned by a Stone in the Bladder, do Publish the following Case."

Dr. Gardiner, the operator in this case, was a rising young surgeon who had studied his profession in London and Paris. He began the prac-

tice of medicine in Boston, where he also lectured on anatomy, which he illustrated by preparations brought from Europe. His enterprise led him to establish an apothecary's shop, in which he carried on an extensive wholesale and retail business. His career as a physician and surgeon was attended with remarkable success, and he soon acquired from his profession both fame and fortune. His prosperity, however, was interrupted by the political troubles which preceded the Revolution, and during the struggle he took sides with the mother country. He thus became odious to the patriots ; and when Boston was evacuated by the British troops, he was compelled to leave his native country and pass eight or ten years in exile. He finally returned and died at Newport, Rhode Island, August 8, 1786, in the 80th year of his age.

Although the Medical Society in Boston was short-lived, no account of the history of medicine in the State would be complete which did not mention its existence. In its day it exerted a good influence on the profession, and showed a zeal on the part of the physicians which is alike honorable to their heads and creditable to their hearts. The origin of the Society may have had some connection with the epidemic of diphtheria which broke out in Boston during the summer of 1735; at any rate, it was organized about that time. It is known to have been in existence late in the autumn of 1741, though ten years afterward there was no trace of it. Dr. Lloyd, who began the practice of medicine in Boston about the year

1752, and continued in it for more than half a century, had no recollection of such an association. This last fact is mentioned by Dr. Bartlett, in his address before the Massachusetts Medical Society, June 6, 1810, and shows that it had disappeared before Dr. Lloyd's time. The founders of this local society, the pioneer association of its kind in the country, represented the active medical thought in Boston; and though they are unknown to us even by name, deserve on this occasion a tribute which is freely given.

A long generation passes, and the Massachusetts Medical Society takes the field, and occupies the broad limits of the State, including the district of Maine. Many of the original members had served in the army, and were familiar with the capital operations of the hospital and the battle-field, while others had filled important public positions of a civil character. In any presence they would have been considered accomplished physicians and surgeons, and they were the peers of other professional men. Together with the clergy they represented the education and refinement of the community. But before entering upon the history of this venerable corporation, I may be allowed to go back and give a sketch of the rise and progress of medicine in Massachusetts during the colonial and provincial periods.

When the Pilgrims landed at Plymouth in the winter of 1620, they found that a few years before their arrival a deadly pestilence had raged all along the New England seaboard, and that the natives

had been more than decimated by the epidemic. Cotton Mather says:—

“The *Indians* in these Parts had newly, even about a Year or Two before, been visited with such a prodigious Pestilence; as carried away not a *Tenth*, but *Nine Parts of Ten* (yea, 'tis said *Nineteen of Twenty*) among them: So that the *Woods* were almost cleared of those pernicious Creatures to make Room for a better *Growth.*”¹

The diagnosis of this disease has been much discussed. By some writers it has been called the plague; but this is a vague term and means neither one thing nor another. Johnson calls it “a sore Consumption, sweeping away whole Families.”² Gookin, who wrote many years later, and who had talked with those who remembered the cases, says that “the bodies all over were exceeding yellow, describing it by a yellow garment they showed me, both before they died, and afterwards.”³ According to Winslow,⁴ the same disease prevailed among the Indians as late as November in the year 1622, which fact seems to eliminate yellow-fever. This would seem to leave small-pox as the disease in question, of which the description is in some respects good. During many years, there had been some slight intercourse between the Indians and stray Europeans who came to the coast on fishing voyages, and it is more than probable that the loathsome disease was thus introduced. Within the period of re-

¹ *Magnalia*, Book i., Chap. ii. 7.

² *Wonder-Working Providence of Sions Saviour, in New England*, Chap. viii. 16.

³ *Massachusetts Historical Collections*, i. 148.

⁴ *Good Newes from New-England*, page 18.

corded history, it is known that whole villages of the natives have been swept away by this sickness. The Indians had no knowledge of medicine, but were accustomed to treat disease largely by incantations and powwows. There is, however, a popular belief to-day that the Indian doctor is skilled in botanical remedies, as he is wont to use the infusions and decoctions of various roots and herbs. While there is no ground for such an impression, he will yet be consulted as long as the race of simpletons continues to exist—perhaps till the millennium. The ravages of small-pox among the ignorant natives were fearful, as they had no knowledge of inoculation or vaccination ; and thus a new danger opposed the white settlers, who were already overburdened by their cares and trials.

During the first winter at Plymouth, the colonists lost half their number by disease, and of the other half most of them were sick, and so weak that they could not take proper care of themselves or of each other. Scarcely twelve men were left alive in the settlement, and only about three times as many women and children to share in their misery. Fifty persons, all told, included the whole population of Plymouth in the spring of 1621. They suffered fearfully from scurvy, and this was largely the cause of the great mortality which befell them. Says Wood, in his "New Englands Prospect:”—

... "whereas many died at the beginning of the plantations, it was not because the Country was unhealthfull, but because their

bodies were corrupted with sea-diet, which was naught, the Beefe and Pork being tainted, their Butter and Cheese corrupted, their Fish rotten, and voyage long by reason of crosse Winds, so that winter approaching before they could get warme houses, and the searching sharpes of that purer Climate, creeping in at the crannies of their crazed bodies, caused death and sicknesse" (page 4).

The colonists had left comfortable homes and settled in a distant wilderness during the inclement season of winter. With none of the customary conveniences of life, they had almost everything to exert a depressing influence. The sensitive ones must have yearned for their native land; and it is not strange that the scorbutic taint, with the intercurrent and superadded nostalgia, proved so fatal. Homesickness is always a strong element in weakening the power to resist disease. Among the passengers who came over in the "Mayflower" was Deacon Samuel Fuller, who survived the sickly season. He was the first physician in the colony, and was for some time the sole physician; and often he must have been troubled to devise means for the care of his patients. His practice was extensive, taking him to Salem, Boston, and other towns in the neighboring colony. During the first ten years of its existence, the Plymouth settlement had reached a population of only two hundred and fifty persons, and some of these lived in places remote from the town. Besides his practice Deacon Fuller—I am sure he would have preferred his church title to any professional one—eked out a livelihood by tilling the soil, after the manner of his neighbors. He died in the year 1633, and by his death the settle-

ment lost one of its most valued and useful inhabitants.

In the early days of New England, it was not customary to address or speak of a physician by the title of doctor. Perhaps one reason for this was that there were so very few persons who had ever taken a medical diploma. The custom of giving the title has literally grown up by degrees. The earliest instance of its use that I have found, is in the Roxbury Church Records,—recently published as “A Report of the Record Commissioners” (Boston, 1881),—where an entry is made under the date of November 5, 1668, which alludes to “Doctor Emery,” of Salem.—(Page 207.)

A surgeon was formerly called a “chirurgeon,” which word by use has been worn down to its present form. It means literally one who performs the manual part of medicine, and originally referred to the external treatment of disease. It is well derived, and was the name always applied in colonial times to one whom we call a surgeon. In England, even at the present time, a surgeon is not addressed as *Doctor*; but he always has the title of *Mister* (*i. e.* Mr.) given to him.

Governor Edward Winslow was skilled in the practice of medicine, and even among the Indians had a wide reputation for his treatment of disease. He was once summoned to visit Massasoit, a prominent chief, who was seriously sick, but who recovered under his care. As a mark of his gratitude, the faithful sachem revealed to the English a plot that was forming against them, but which

was averted by the timely information. A full report of the case with the treatment is found in Winslow's "Good Newes from New-England."—(London, 1624,) pages 25-32.

Plymouth colony, owing to its small and sparse population, had only a few physicians. At the time of its union with Massachusetts under the second charter, it contained but 9,000 inhabitants, and it can easily be inferred that its influence on the general practice of medicine was of little account. The founders of Massachusetts were men of more education and larger means than those who settled Plymouth, and in the natural course of events it is not strange that they should have politically absorbed the older colony. On the other hand, the founders of Plymouth were men of deep religious thought and convictions, and they set in motion a system of ecclesiastical polity which has since overrun Massachusetts ; and to-day the church government prevailing in this State is more closely allied to that which existed in Plymouth than to any other form. I make this digression in order to show that it is not always numbers that count. In the plan of creation the fittest will survive.

Before the colony of Massachusetts Bay was fairly launched in England, the question of a medical man to accompany the planters was discussed by the Company. At one of its earliest meetings, held March 5, 1628, it is recorded that :—

A Proposicon beeinge made to Intertayne a surgeon for [the] plantacon Mr Pratt was ppounded as an abell man vp[on]

theis Condiccons Nameley That 40^{lb} should bee allowed him viz^t for his Chist 25^o the Rest [for] his owne sallery for the first yeere puided yt he [continue] 3 yeeres the Comp^o. to bee at Charge of transporting his wiffe & a ch[ild] haue 20^l a yeere for the other 2 yeeres & to build him a ho[use at] the Comp^o Chardge & to allott him 100 acr^s of ground but if he stay but one yeere then the comp^o to bee at Chardge of his bringing back for Englan^d & he to Leaue his s^ru[ant] and the Chist for the Comp^o seruice."

Agreed wth Robert Morley s^ruant to M^r Andrewe Mathewes late barber surgeon to s^rue the Comp^o. in Newe England for three y[ears] the first yeere to haue 20 nobles the second yeere [30? and the third] yeere 20 markes, to serue as a barber & a surgeon [on all] occasyons belonging to his Calling to aney of this [Company] that are planters or therre servants, and for his [chest and] all in it whereof he hath geeuen an Inuventory . . . sight of it It bee approoued fyve pounds Is . . . and payd to him ffor it & the same to bee fo[rthwith payd.]—(General Court Records, i. 3^a.)

Mr. Pratt's given name was John; and after coming to New England he lived at Cambridge. The last entry in these records reminds us of the time when barbers were doctors by brevet, as it were, and performed many operations of minor surgery, such as pulling teeth, bleeding, and cupping. A noble was worth about 6s. 8d.; and a mark was double the value of a noble.

For many years before the Puritans came to this country, they were subjected to bitter persecution; and foreseeing the possibility of an ejectment, a considerable number of their ministers studied medicine. They saw the probable needs of the future, and fitted themselves, as best they could, for any emergency that might arise in a new settlement; hence they formed a large proportion of the early physicians of Massachusetts. History repeats herself, and we see to-day American missionaries who first study medicine as a par-

tial preparation for their new duties. In fact it is a custom as old as civilization itself, that the priests are the ones to collect and preserve the traditions of medicine. These Puritan ministers were men of liberal education, and some of them authors of the earliest medical treatises printed in America. It was with them a matter of conscientious duty to heal the body as well as to save the soul. Each one practised in his own flock, and for his fee generally received that which is considered better than money, though not equally current at the counter. Occasionally they took part in the medical controversies of the day, and defended their views with much skill and ability. Cotton Mather speaks of this union of the two professions as an "Angelic Conjunction," and says that "ever since the days of *Luke* the Evangelist, Skill in *Physick* has been frequently professed and practised, by Persons whose more declared Business was the Study of Divinity."¹

At the period when Massachusetts was settled, medicine was an art rather than a science, and just ready to take a new departure under the guidance of Sydenham. Certain facts about disease were learned by rote, as it were, and the treatment was nearly the same in all cases without regard to the minute symptoms. The public believed in *specifics*; and remedies were prescribed, as if they were infallible or sovereign. Says Shakespeare:

"The sovereign'st thing on earth
Was parmaceti for an inward bruise."

¹ *Magnalia*, Book iii., Chap. xxvi. 151.

About this time there were in Europe two schools of medical practice, of which the one was in the habit of prescribing vegetable substances alone, and the other for the most part mineral preparations. The first of these schools was denominated the Galenists, as they were supposed to follow the teachings of Galen ; and they might be termed the botanic doctors of that day. The other school adopted the doctrines of Paracelsus, and gave "chemical" medicines, which included mineral substances and a few of the most active vegetable compounds. The supporters of the second school were sometimes called chemists. There was of course a bitter rivalry between the two sects ; and, if everything that was said about the one by the other was true, the poor patients had to suffer. It is very likely that the prejudice existing to-day against mineral medicines dates back to this hostility.

The following advertisement appears in "The Boston Gazette," June 19, 1744, and alludes to the medicines of the two schools. The advertiser, Mr. Gardiner, who has been mentioned before in these pages, was not only the most noted druggist in New England, but also an accomplished physician and surgeon:—

"Just imported in the Ship from London. And to be Sold by Mr. Sylvester Gardiner, At the Sign of the Unicorn and Mortar in Marlborough-Street.

All Sorts of Drugs and Medicines, both Chymical and Galenical ; where all Doctors, Apothecaries or others, may be supply'd with the very best and freshest of Either at the lowest Price ; and Captains of Ships with Doctor's Boxes put up in the neatest and best Manner ; with printed Directions : Likewise all Mer-

chants may be furnished at the same Place with Surgeons Chests put up in the same Manner, and at the same Price, as they are for the Royal Navy, at the Apothecary's Hall in *London*; where only are to be Sold by Appointment of the Patentees, the true Doctor *Bateman's Pectoral*."

The early physicians of New England, however, do not seem to have entered into this medical controversy, but gave such remedies as they saw fit, without regard to either school, though they followed a routine practice. The relation of cause and effect was slighted by them, and an air of mystery and superstition pervaded the whole domain of therapeutics. The literature of the profession was scanty, and for that reason easily mastered. They had no knowledge of pathology, and but little of anatomy. It must not be forgotten that there were but very few regular graduates of medicine in the country for more than a hundred years after its settlement. From the year 1667 to 1730, a period of sixty-three years,—according to Judd, in his History of Hadley, Massachusetts,—there was neither physician nor surgeon in Northampton, a large and rich town; though at one time an unsuccessful attempt was made to obtain a bone-setter.—(Page 616.) In such places there was always some good housewife who acted as nurse on important occasions, and she generally performed well the part of a doctor. Only to this audience I will whisper, what must not be repeated abroad, that there was as little sickness and as much longevity in Northampton as in other towns that were favored by physicians. Every household had its simple do-

mestic remedies for common complaints, and few were the families that did not possess some old book containing manuscript receipts for ordinary ailments.

The remedies used by the early practitioners of New England were largely made up of simples, as they were called, in contradistinction to compounds, and consisted principally of herbs dear to old women, though none the less valuable on that account. Occasionally they strike us as absurd, and sometimes excite feelings akin to disgust. An electuary of millepedes looks learned, and sounds as if it might be sweet ; but looks are nothing and sound is empty, when we consider that *millepedes* is the scientific name for sowbugs, so common in the country, under damp, soggy planks. Excretions and secretions were employed as curative agents, and had their particular parts to play in the treatment of disease. These remedies were prescribed at times by the best physicians two hundred years ago. In England, during this period, the practice of medicine was equally crude. When Charles II. was on his death-bed, according to Macaulay, he was bled largely, and a loathsome volatile salt, extracted from human skulls, was forced into his mouth.

In "The Boston Gazette, or, Weekly Advertiser," December 18, 1753, is a long communication, covering two pages of the newspaper, setting forth "*Examples of Great Medicines drawn from unpromising Bodies.*" It is made up of extracts from a work published at Oxford, England, in the

year 1664. The article is printed with the following sub-headings : “*Medicines out of Soot* ;” “*The Use of Horse-dung* ;” “*Medical Virtues of Human Urine* ;” “*Medicines out of Humane Blood* ;” and “*The Great Effects of Sow Buggs*.” Under the second sub-heading the writer goes on to show that “there are not any Medicines to be taken into the Body more cheap and contemptible than the *Excrements of Men and Horses*, and than *Insects* ; and yet that even these want not considerable Medical Virtues.” He furthermore asserts that “the *juice of Horse-dung*, especially of *Stone-horses*,”—i. e. stallions,—is good for the stoppage of urine, and certain other complaints.

The early physicians used to place much reliance on the powers of nature to expel the *materies morbi* from the system, particularly by way of the kidneys ; and a glass vessel to hold the urine was considered a necessary article in the sick-room. A very superficial examination of the fluid was made, by holding it up between the light and the observer, in order to see its color, and whether it was clear or turbid ; and from the condition of the water the conclusions were drawn.

The following signs of urine are taken from a book, by W. Mather, and published probably at London in the year 1684. It is a volume of 466 pages, but the title-page is missing:—

- “ 1. Red Urine signifieth heat of the Blood.
- “ 2. White, rawness and indigestion in the Stomach.
- “ 3. Thick, like puddle, excessive labour or sickness.
- “ 4. White or red gravel in the bottom threatens the Stone in the Reins.
- “ 5. Black or green, commonly death.”

Dr. George Emery, a Salem physician of unsavory reputation, in November, 1657, was fined forty shillings

"for changing a bottle of water of Goody Laskin, & respitted unill next Court & to be remitted if he shall acknowledge he did euill in it, or not well in soe doing & fees Court 30^d."—(Essex County Records, Salem Court.)

John Josselyn, an Englishman, came to this country in the summer of 1663, and afterward wrote a book, which was entitled "*New Englands RARITIES Discovered : in Birds, Beasts, Fishes, Serpents, and Plants of that Country. Together with the The Physical and Chyrurgical REMEDIES wherewith the Natives constantly use to Cure their DISTEMPERS, WOUNDS, and SORES.*" It was published at London in the year 1672, and contains a large number of homely remedies to be found in the *fauna* and *flora* of the country. The following morsels of medical wisdom are taken from different parts of it :—

Picking the gums with the bill of an osprey is good for the tooth-ache; Bear's grease is good for aches and cold swellings; Beaver's cods are much used for wind in the stomach and belly, particularly of pregnant women; Moose horns are much better for physiek, than the horns of other deer; A stone found in the head of the cod-fish, when pulverized, stops fluxes of blood, and one found in their bellies is a remedy for the stone in the bladder; Scarifying the gums with a thorn from the dog-fish's back cures tooth-ache; The heart of a rattle-snake is an antidote to its bite; Burning "spunck, an excrescence growing out of black birch," in two or three places on the thigh of a patient, helps sciatica; Watermelon is often given to those sick of fevers, and other hot diseases, with good success.

Much dependence used to be placed, as I have already said, on the use of roots and herbs; and the various kinds thought to possess healing prop-

erties were carefully gathered during their season and preserved for future use. Many herbs, originally brought from England for their medical virtues, have since become naturalized, and are now good American plants. Some have multiplied so rapidly and grown so plentifully in the fields and by the roadside, that they are considered common weeds. Wormwood, tansy, chamomile, yarrow, dandelion, burdock, plantain, catnip, and mint, all are plants that came here by importation. Of course there were indigenous ones which the natives used medicinally; and a knowledge of these they imparted to the whites. The foreign plants made their way into the interior, as fast as civilization extended in that direction. Dr. Douglass, in "A Summary, historical and political, of the First Planting, Progressive Improvements and Present State of the British Settlements in North-America," first published at Boston,—Volume I. in the year 1749, and Volume II. in 1751,—says:—

"Near *Boston* and other great Towns some Field Plants which accidentally have been imported from *Europe*, spread much, and are a great Nusance in Pastures, . . . at present they have spread Inland from *Boston*, about 30 Miles."—(ii. 207.)

Such was the popular faith in botanical treatment that a family was considered improvident, which did not have on hand a goodly stock of dried specimens of *materia medica*. When sickness invaded the household, the pages of the receipt-book—a sort of family physician—were carefully scanned in order to find some balm to relieve the unlucky sufferer; and when something was found

to meet the case, it was given without rhyme or reason, to the weal or woe of the patient! Most of these so-called remedial agents were innocent of positive good or evil, and at the worst could only put off for a short time the period of recovery. But in some cases the wonder is that the poor patient got well at all after the polypharmaceutical treatment. If he was strong enough to withstand the effect of the dose, he lived to bless the remedy, in the firm belief that his restoration was due to the medicine.

John Winthrop, the founder of Boston and Governor of Massachusetts, was well versed in medicine, but his public services to the colony were so marked that his minor ministrations among friends and neighbors are thrown into the background. The venerable Cotton says of him just before his death, that he had been a "*Help for our Bodies by Physick, for our Estates by Law.*"¹

His son, John Winthrop, Jr., for some years an inhabitant of Massachusetts and afterward Governor of Connecticut, was a noted physician. He was one of the earliest members of the Royal Society of London and an accomplished scholar. He had a large correspondence with scientific men, from which many interesting facts are gathered about medicine in the early history of the colony. A third generation of the family represented in the person of Wait Winthrop, a son of John, Jr.,

¹ *Magnalia*, Book ii., Chap. iv. 15.

was also proficient in the profession. In Cotton Mather's sermon, preached at his funeral, November 7, 1717, there is an "Epitaphium," from which the following is an extract:—

MEDICINÆ Peritus ;

Qui Arcanis vere Aureis, et Auro preciosioribus potitus ;
Quæque et *Hippocratem* et *Helmontium* latuerunt,
Remedia panacæasque Adeptus ;
Invalidos omnes ubique sine pretio sanitati restituit ;
Et pene omnem Naturam fecit Medicam.

In his "History of New England" (II. 315, 316), Governor Winthrop mentions the first appearance in Boston of a particular malady of a constitutional character, which is coeval with the history of mankind. It was brought from Spain by a sailor during the spring of 1646, and is called in Winthrop's account by the name of *lues venerea*. It was some time before its real nature was "discovered by such in the town as had skill in physic and surgery, but there was not any in the country who had been practised in that cure;" and during the interval sixteen persons became affected. Fortunately at this period a young surgeon happened to arrive, "who had had experience of the right way of the cure of that disease," and, as the record goes, "He took them in hand, and through the Lord's blessing recovered them all [blank] in a short time." For the reputation of the sailor's wife who had just been delivered of a child, I will add that the disease is supposed to have been spread by the neighbors who drew her breasts as well as suckled her baby. The magistrates took

the case under consideration, but came to no satisfactory conclusion in regard to it. It was thought by some "that the woman was infected by the mixture of so many spirits of men and women as drew her breast." This is the earliest recorded instance in the colony of a form of disease which is familiar to physicians and common in all seaport towns..

Winthrop, in his History (I. 313-316), gives also another occurrence of medical interest. It is an account of a monstrous birth, which created much excitement when it became publicly known. It seems that one Mary Dyer, the wife of William Dyer, of Boston, was delivered of a monstrosity, October 17, 1637, and its birth concealed by Good-wife Hawkins, who officiated on the occasion. The mother was a milliner, and had always borne a good reputation. The child was still-born, and had been viewed by no other person than the mid-wife and Anne Hutchinson, the enthusiast. Another woman had had a glimpse of the teratitical object, but was unable to keep the secret, as the other two had done. In this way the matter leaked out. When Mrs. Hutchinson was about to leave the colony some time afterward, she was questioned in regard to the affair, and then told everything. She said by way of excuse that she had been advised by Mr. Cotton, the minister, to take this course; and subsequently Mr. Cotton himself justified it to the Governor, partly on the ground that it was an admonition from Heaven to that particular family, and the world at large was

not supposed to be concerned in the matter. The midwife's report of the case to Governor Winthrop was as follows:—

"It was a woman child, still-born, about two months before the just time, having life a few hours before; it came hiplings till she turned it; it was of ordinary bigness; it had a face, but no head, and the ears stood upon the shoulders, and were like an ape's; it had no forehead, but over the eyes four horns, hard and sharp; two of them were above one inch long, the other two shorter; the eyes standing out, and the mouth also; the nose hooked upward; all over the breast and back full of sharp pricks and scales, like a thornback; the navel and all the belly, with the distinction of the sex, were where the back should be, and the back and hips before, where the belly should have been; behind, between the shoulders, it had two mouths, and in each of them a piece of red flesh sticking out; it had arms and legs as other children; but, instead of toes, it had on each foot three claws, like a young fowl, with sharp talons."

The stories were so conflicting, and the excitement ran so high in the matter, that the Governor, with the advice of some of the magistrates and elders of the town, ordered the body to be taken up, six months after its burial, when "most of those things were to be seen, as the horns and claws, the scales, etc." It is also recorded that when the child "died in the mother's body (which was about two hours before the birth), the bed whereon the mother lay did shake." This furnished all the testimony needed at that time to show that the whole affair was supernatural.

Poor Mary Dyer was subsequently hanged on Boston Common, June 1, 1660, a victim to the persecution of the Quakers.

It is not a little singular that Mrs. Hutchinson herself, a short time afterward, was also the subject of a medical and clerical inquiry. Her theological

heresy had taken a uterine form of expression, according to the belief of those days, though now it would be considered a case of hydatids. She was then living in Rhode Island, and—I again quote from Winthrop's History—

“ After her time was fulfilled, that she expected deliverance of a child, was delivered of a monstrous birth, which, being diversely related in the country (and, in the open assembly at Boston, upon a lecture day, declared by Mr. Cotton to be twenty-seven several lumps of man's seed, without any alteration, or mixture of anything from the woman, and thereupon gathered, that it might signify her error in denying inherent righteousness, but that all was Christ in us, and nothing of ours in our faith, love, etc.) hereupon the governour wrote to Mr. Clarke, a physician and a preacher to those of the island, to know the certainty thereof, who returned him this answer: Mrs. Hutchinson, six weeks before her delivery, perceived her body to be greatly distenpered, and her spirits failing, and in that regard doubtful of life, she sent to me, etc., and not long after (in immoderato fluore uterino) it was brought to light, and I was called to see it, where I beheld, first unwashed (and afterwards in warm water,) several lumps, every one of them greatly confused, and if you consider each of them according to the representation of the whole, they were altogether without form.” “ The small globes I likewise opened, and perceived the matter of them (setting aside the membrane in which it was involved,) to be partly wind and partly water. Of these several lumps there were about twenty-six, according to the relation of those, who more narrowly searched into the number of them. I took notice of six or seven of some bigness; the rest were small; but all as I have declared, except one or two, which differed much from the rest both in matter and form; and the whole was like the [blank] of the liver, being simular and every where like itself. When I had opened it, the matter seemed to be blood congealed. The governour, not satisfied with this relation, spake after with the said Mr. Clarke, who thus cleared all the doubts: The lumps were twenty-six or twenty-seven, distinct and not joined together; there came no secundine after them; six of them were as great as his fist, and one as great as two fists; the rest each less than other, and the smallest about the bigness of the top of his thumb. The globes were round things, included in the lumps, about the bigness of a small Indian bean, and like the pearl in a man's eye.”—(i. 326-328.)

These extracts will serve to show some of the

phases of popular belief in regard to medicine as well as theology, which existed two hundred and fifty years ago. They help us catch the coloring of that period; and no picture of the times is complete without it. It would be impossible for us to reach the same conclusions, because we reason from different premises. There is a kind of moral parallax as well as a physical one; and we should bear in mind the apparent displacement of an object as seen from different points of time as well as of position. The angle of metaphysical vision to-day subtends a much larger arc than it did two or three centuries ago.

Among those who came over in Winthrop's fleet was Richard Palgrave, a physician, from Stepney, London. He settled in Charlestown, though neither himself nor his wife was ever connected with the church in that town. Their ecclesiastical relations were always with Boston, where those of their children who were born in this country were baptized. He lived about twenty years, after coming to New England.

Another passenger in the same fleet was William Gager, one of the deacons of the Charlestown Church, whom Governor Dudley styles "a right godly man, skilful chyrurgeon," but who unfortunately died soon after his arrival.

Another among the early settlers of Massachusetts who practised medicine, was Giles Firmin, Jr., who came to this country in the year 1632. His father—"a godly man, an apothecary of Sudbury in England," according to Winthrop—arrived

here about the same time; and in some accounts the two have been confounded from the similarity of their names. It is very likely that Giles, senior, was a medical practitioner. The son did not long remain in Boston, but soon returned to England; coming again, however, to these shores a few years subsequently. He had been educated at the University of Cambridge, and was learned in medicine. He is the first man known to have taught in New England this branch of science, and he seems to have left a professional imprint on the minds of his students. He soon removed to Ipswich, where he was widely known as a successful physician. His practice does not appear to have been a lucrative one, for he writes to Winthrop some years afterward,—“I am strongly sett upon to studye divinitie, my studies else must be lost: for physick is but a meene helpe.”¹ Subsequently he carried this plan into execution, and studied theology, after which he returned to England, where he was ordained and settled as a rector. Nevertheless, he continued to practise his early profession.

The apostle Eliot, ~~under~~ under date of September 24, 1647, writes to Mr. Shepard, the minister of Cambridge, and expresses the desire that—

“Our young Students in Physick may be trained up better than yet they bee, who have onely theoreticall knowledge, and are forced to fall to practise before ever they saw an Anatomy made, or duely trained up in making experiments, for we never had but one Anatomy in the Countrey, which Mr. *Giles Firman* (now in England) did make and read upon very well, but no more of that now.”²

¹ Hutchinson's Collection of Original Papers, &c., page 109.

² Massachusetts Historical Collections, third series, iv. 57.

An anatomy is the old name for a skeleton, and Mr. Firmin may be considered, in point of time, the first medical lecturer in the country. His instruction must have been crude, and comprised little more than informal talks about the dry bones before him; but even this might be a great help to the learners. At any rate it seems to have excited an interest in the subject, for the recommendation is made, at the session of the General Court beginning October 27, 1647,—a few weeks later than the date of Eliot's letter,—that “we conceive it very necessary y^t such as studies phisick, or chirurgery may have liberty to reade anatomy & to anotomize once in foure yeares some malefacto^r in case there be such as the Courte shall allow of.”¹

The apostle Eliot himself was skilled in medicine, and he tried to teach the Indians some general principles of the study as well as a knowledge of the human body. He was desirous that they should be instructed in the rules and precepts of the art, so that they might give up their “pow-wows” and rely on prayer in the treatment of the sick.

Charles Chauncy, that stern puritan, President of Harvard College, and also Leonard Hoar, who succeeded him in the presidency, were regular graduates of medicine at Cambridge in England. Chauncy left six sons, all of whom were educated at Harvard College and became preachers. They had, says Cotton Mather, “an eminent Skill in *Physick* added unto their other Accomplishments;

¹ General Court Records, ii. 175.

which like *him* [their father], they used for the Good of many; as, indeed, it is well known, that until Two Hundred Years ago, *Physick in England*, was no Profession distinct from Divinity.”¹ John Rogers, the fifth president of the College, was also a practitioner of medicine. Hoar was the first president who was a graduate of the institution, but Rogers was the earliest graduate who became its president.

Michael Wigglesworth was an early minister and physician of considerable note in the colony. A native of England, he graduated at Harvard College, in the class of 1651. For a short time he was a tutor and professor in the college; though subsequently he was ordained over the church at Malden, where he remained until his death, which occurred June 10, 1705. He was the author of “The Day of Doom,” a poem which passed through nine editions in this country, and two in England. He had a large medical practice, and was accounted a skilful physician.

Elisha Cooke was a prominent physician as well as a politician of this period. He was born in Boston, September 16, 1637, and graduated at Harvard College in the class of 1657, being one of the first natives of the town that studied medicine. While esteemed as a physician, his reputation is based more on his labors in connection with the body politic than the body physical. He died October 31, 1715, having filled many public positions of trust and honor.

¹ *Magnalia*, Book iii., Chap. xxiii., 140.

John Dunton, who came to New England in the spring of 1686, wrote home some interesting letters which were published. They contain considerable gossip about men and things in the colony at that time, and refer in particular to two Boston physicians. Dr. Thomas Oakes—a brother of President Oakes, and a graduate of Harvard College—Dunton calls “the greatest *Æsculapius* of the Countrey,” and says that—

“ His wise and safe Prescriptions have expell’d more Diseases and rescu’d Languishing Patients from the Jaws of Death, than Mountebanks and Quack-Salvers have sent to those dark Regions: And on that score, Death has declar’d himself his Mortal Enemy: Whereas Death claims a Relation to those Pretenders to Physick, as being both of one Occupation, viz.: that of Killing Men.”—(“The Publications of the Prince Society,” iv. 93.)

In speaking of Dr. Benjamin Bullivant, afterward Governor Andros’s Attorney-General, he writes that—

“ His Skill in Pharmacy was such, as rendered him the most compleat Pharmacopean, not only in all Boston, but in all New-England; and is beside, as much a Gentleman as any one in all the Countrey.” . . . “ He is as intimate with Gallen and Hypocrates (at least ways with their works,) as ever I have been with you, Even in our most Familiar Converse. And is so conversant with the great variety of Nature, that not a Drug or Simple can Escape him; whose Power and Vertues are known so well to him, he needs not Practise new Experiments upon his Patients, except it be in desperate Cases, when Death must be expell’d by Death. This also is Praise-worthy in him, That to the Poor he always prescribes cheap, but wholesome Medicines, not curing them of a Consumption in their Bodies, and sending it into their Purses; nor yet directing them to the East-Indies to look for Drugs, when they may have far better out of their Gardens.”—(“The Publications of the Prince Society,” iv. 94-96.)

Harvard College was founded in the year 1638; and during the period from this time till 1750, there had been but nine of its graduates who had

ever received a medical degree. Of this number, two had taken it at Padua, in Italy; one each at Cambridge, Oxford, Aberdeen, and Leyden; and three others had received it probably in England, though the place is not mentioned. The degree given at Oxford was a Baccalaureate of Medicine. Between the classes of 1737 and 1750 there were five graduates who many years afterward received from the College the degree of M.D., *pro honoris causâ*. They were Dr. Edward Augustus Hol-yoke and Dr. Cotton Tufts, both former presidents of this Society; Dr. John Sprague, of Dedham; Dr. Thomas Bulfinch, of Boston, and Dr. Oliver Prescott, of Groton.

The opportunities for successful imposition in the treatment of disease were unusually favorable in the early days of the colony; and the quacks were not slow to avail themselves of the chances. During the first winter at Boston, the Court of Assistants fined Nicholas Knopp five pounds—

“for takeing vpon him to cure the seurye by a water of noe worth nor value, which he solde att a very deare rate, to bee imprisoned till hee pay his ffine or giue securytie for it, or els to be whipped & shalbe lyable to any mans accōn of whome he hath receaued money for the s^d water.”—(General Court Records, i. 67.)

The record, however, does not state which dose he took in the way of punishment, but as three pounds of the fine were subsequently remitted, it is fair to infer that he was not whipped. If we now had as wise legislation in regard to medicine, there would be less quackery in the community. By a law passed a few years later, regulating the

precedence of passengers in ferry-boats, preference was given to public personages, and to "Physicians, Chirurgeons, and Midwives."

The colonial authorities appear to have taken steps, at an early day, to guard against the introduction of infectious and contagious diseases from foreign ports. An order was passed by the General Court, at the session beginning in March, 1647-48, which established a strict quarantine over all vessels coming from the West India Islands. It prohibited the landing of persons or goods from such vessels, until the Council saw fit to decree otherwise. At that time "y^e plague or like in[fectious] disease,"—perhaps yellow fever,—was raging in some of these islands, and this fact was the cause of the order. During the session beginning May, 1649,—one year afterward,—it is recorded that—

"The Courte doth thinke meete, that the order, concerning the stoping of West India ships at the Castle should hereby be repealed seeing it hath pleased God to stay the sicknes there."—
(General Court Records, ii. 238.)

No further sanitary regulations are recorded until October 11, 1665, when a warrant was issued by the General Court, ordering all vessels coming from England to be placed in quarantine. This order was due to the prevalence of the "plague" in London at that time; but it was repealed just two years afterward, owing to the disappearance of the disease. The quarantine grounds then were near the Castle, afterward called Castle William, but now known as Fort Independence.

These two orders appear to have been made to meet special emergencies; but they comprise the whole legislation of the seventeenth century, so far as it relates to quarantine in Massachusetts.

It is said that the first appearance of yellow fever, in what is now the United States, occurred during the summer of 1693, in Boston, where it had been brought from Barbadoes. A fleet, under the command of Sir Francis Wheeler, arrived in the early summer of that year, after an unsuccessful attempt on the island of Martinico. Chief Justice Sewall alludes to this fleet in his Diary (Massachusetts Historical Collections, fifth series, V. 379, 380), under date of June 13, when he says that "severall of the Frigotts come up above Long Island;" though he does not mention whence they came. It is probable that they had arrived within a few days. A short time afterward he records that—

"Last night Tim^o Wadsworth's man dies of the Fever of the Fleet, as is supposed, he having been on board and in the Hold of some ship. Town is much startled at it."

Still later, under date of July 24, he writes:—

"Capt. Turell is buried. Mr. Joseph Dassett was buried yesterday, being much lamented. Jn^o Shove and —— Saxton died before, all of the Fleet-Fever, as is supposed; besides others. The Town is much startled. Capt. Byfield speaks of removing his wife and daughters to Bristow. One of the Fleet-Women dies this day, July 24, 1693, at David Johnson's, over against the Town-house.

"July 25. Three Carpenters die.

"July 26. Dr. Pemberton dies. Persons are generally under much consternation, which Mr. Willard takes notice of in his Prayer."

At irregular intervals after this time, quarantine laws were passed or modified to meet the needs of

the public. A necessary adjunct to such legislation was a hospital; and as early as the summer of 1716, a committee of the General Court was appointed to select a location for such a building. In due time they reported on two sites, Spectacle Island and Squantum Neck; but as the owner of the Island would not sell it at a fair price, they recommended Squantum as the proper place. A strong protest to this proposition, however, came from the towns of Dorchester, Braintree, and Milton, and that project was abandoned. But during the next year a quarantine hospital was built on Spectacle Island, which was used for infectious diseases until the year 1737, when the establishment was transferred to Rainsford Island, where it remained until the year 1849. It was then established on Deer Island, where it was kept until April, 1867, when it was removed to Gallop's Island, at which place the quarantine buildings for the port of Boston are now situated.

In the year 1649, a law was passed which is commendatory to the wisdom of that time. It regulated, within certain limits, the practice of medicine and surgery, and required the practitioner to act according to the most approved precepts of the art in each domain. It was a salutary enactment, as far as it went, but it afforded only a slight protection against the deficiencies of the profession. It was like leaning on a broken reed, however, since it made no provision for educating medical men and established no test of their qualifications. The attempt, however, is worthy of notice as being

the first one, on the part of the colonial authorities, to restrain the quackery of the day. The tendency of the law was to confine the profession to skilled persons; and it must be granted that the whole medical legislation of that period was in the interest of sound learning, as understood at the time. The present generation will do well if, tried by the standard two centuries hence, they display as much common sense in such matters as was shown by the founders of the colony.

The law is as follows:—

Chirurgeons, Midwives, Physitians.

Forasmuch as the Law of God allowes no man to impaire the Life, or Limbs of any Person, but in a judicial way;

It is therefore Ordered, That no person or persons whatsoever, employed at any time about the bodyes of men, women, or children, for preservation of life or health; as Chirurgions, Midwives, Physitians or others, presume to exercise, or put forth any act contrary to the known approved Rules of Art, in each Mystery and occupation, nor exercise any force, violence or cruelty upon, or towards the body of any, whether young or old, (no not in the most difficult and desperate cases) without the advice and consent of such as are skillfull in the same Art, (if such may be had) or at least of some of the wisest and gravest then present, and consent of the patient or patients if they be *mentis compotes*, much less contrary to such advice and consent; upon such severe punishment as the nature of the fact may deserve, which Law nevertheless, is not intended to discourage any from all lawfull use of their skill, but rather to incourage and direct them in the right use thereof, and inhibit and restreine the presumptuous arrogancy of such as through presidence of their own skill, or any other sinister respects, dare boldly attempt to exercise any violence upon or towards the bodyes of young or old, one or other, to the prejudice or hazard of the life or limbe of man, woman or child.—("The General Laws and Liberties of the Massachusetts Colony," Cambridge, 1672, page 28.)

The following petition in manuscript is found, without signature or date, among the Massachu-

setts Archives at the State House (IX. 21). In the arrangement of the papers it has been assigned to the year 1653, and it belongs doubtless to that period. It probably had some connection with the discussion growing out of the condition of affairs which culminated in the law just mentioned:—

To the Honored Court.

Wheras there be many Chirurgions that came over in the Ships into this Bay, & here practise both Physick & Chirurgery to the hazarding of the lives & limbes of some, & the detriment of many, being vnskilfull: in those Arts. May it please this Honoured Court to take it into Consideration whether such ought not to be restrained, & that first they may be exercised by the skilfull & authorised Phisitians & Chirurgions in this towne, & then being found skilfull, & approved by them may by some Magistrates be licensed to practise the time they are resident here, but if any one shall presume on shore to practise wthout liberty granted, that some fine may be imposed vpon him for every such default according to you^r discretion.

With a low standard of professional education even among the physicians, it was not to be expected that there would be much general intelligence on medical matters in the community at large. A stream never rises higher than its source. The ignorant are proverbially credulous and easily deceived. The following extract will show the strain to which weak credulity may be put. It is taken from "The Boston Weekly News-Letter," January 14, 1717, which was the first newspaper, and at that time the only one, published on this continent. Perhaps some cynic in this audience may say that for pure and unadulterated absurdity it can be capped by almost any quack advertising sheet at the present time, and I am not ready to dispute it.

Boston, On the Lords day Morning the sixth Currant, a strange thing fell out here, One Thomas Smith a Sawyer about four Month ago, bought a Lusty Tall new negro, fit for his Employ, who after complain'd of something within him that made a Noise Chip, Chip, Chip; his Master sent for a Doctor, one Sebastian Henry Swetzer a German, who told him he had Worms, wherenpon he gave him some Physick on Wednesday: from Thursday till the Lords Day he gave him some Powders, which on the Lords Day had that effect as to cause him to vomit up a long Worm, that measur'd a hundred and twenty eight Foot, which the negro took to be his Guts; it was almost as big as ones little Finger, its Head was like a Snakes, and would receive a Mans little Finger into its Mouth, it was of a whitish Colour all full of Joynts, its tail was long and hard, and with a Microscope it seem'd to be hairy: the Negro before voiding the Worm had an extraordinary Stomach.

During the early days of the Colony sometimes the booksellers and printers kept a small assortment of popular remedies for common ailments, as well as of medical books. In an advertisement on the last leaf of "THE MOURNERS CORDIAL Against Excessive SORROW," a duodecimo volume "Very Suitable to be given at Funerals," written by "Samuel Willard, Teacher of a Church in BOSTON," and published in the year 1691, it is announced that—

That Excellent *Antidote* against all Gripings called *Aqua anti torminalis*, which if taken it not only cures the Gripings of Guts, & Wind Cholick, but preventeth that woful Distemper the *Dry Belly Ach*. Sold By *Benjamin Harris*. Price 3s. the Half Pint Bottle.

Harris was one of the printers of the little book; and he advertises in the same page "An Ingenious Piece which turns *George Keith* inside outwards," by Cotton Mather. The price of it, in boards, was one shilling,—the cost of about two ounces of the medicine. At the sale of a part of the Brinley

library in New York, two years ago, a copy of the same work, under the title of "Little Flocks Guarded against Grievous Wolves," fetched twenty-eight dollars.

The publisher of "The Boston Evening Post," in his issue of March 21, 1737, advertises "The Poor Man's Family-Book, Or, A new Edition of *Culpeper's* London Dispensatory" as a work "Very Useful for Families, especially in the Country, where learned and skilful Physicians are not very easily met with." The merits of the edition are given with some prominence. The book purports to contain:—

1. *Three hundred useful Additions.*
2. *All the Notes that were in the Margent are brought into the Book between two such Crotche's as these [].*
3. *The Virtues, Qualities and Properties of every Simple.*
4. *The Virtues and Use of the Compounds.*
5. *Cautions in giving all Medicines that are dangerous.*
6. *All the Medicines that were in the Old Latin Dispensatory, and are left out in the New Latin one, are Printed in this Impression in English, with their Virtues.*
7. *A KEY to Galen and Hippocrates, their Method of Physick, containing Thirty three Chapters.*
8. *In this Impression the Latin name of every one of the Compounds is Printed, and in what Page of the new Folio Latin Book they are to be found.*

The following advertisement is taken from "The New England Courant," of December 17, 1722. The substance of it is much like the quack notices of the present time, though the advertiser is more considerate to the poor than we are now apt to see.

For the Good of the Publick, a certain Person hath a secret Medicine which cures the Gravil and Cholick immediately, and Dry Belly Ach in a little Time; and restores the Use of the Limbs

again, (tho' of never so long Continuance,) and is excellent for the Gout. Enquire of Mr. *Samuel Gerrish*, Bookseller, near the Brick Meeting House, over against the Town-House in Boston. *N. B.* The Poor who are not able to pay for it, may have it *gratis*.

The early practitioners of medicine had a fondness for venesection, and the lancet was in constant requisition. Good Deacon and Doctor Fuller, who lived at Plymouth, writes to Governor Bradford, under date of June 28, 1630, "I have been at Matapan [Dorchester], at the request of Mr. Warham, and let some twenty of these people blood; I had conference with them, till I was weary." This last expression may have been also his guide in the medical treatment; that is, he continued to bleed until he got tired. Such heroic practice was of common occurrence, and excited no remark. The ministers too were expert in phlebotomy, and they were wont to bleed and pray, in all severe cases. Then there were the barber-surgeons who wielded with equal facility the razor and the lancet, as well as used the jaw-breaking key on the aching teeth of their unfortunate friends. The pathetic story of William Dinely has often been told. He was a barber-surgeon who perished during a severe snow-storm, December 15, 1638, between Boston and Roxbury, whither he was going to pull a tooth. It was many days before his body was found, and his poor widow suffered great anguish. Her grief hastened the coming event which she was anticipating with so much joy, and she named the baby *Fathergone* Dinely.

Formerly in England the patient, while undergoing venesection, was wont to grasp a pole in order to make the blood flow more freely, and as the pole was liable to be stained, it was painted red. When it was not in use, the barber would hang it up on the outside of his door, with white linen swathing-bands twisted round it. The red and white pole of the present day, so conspicuous in front of barbers' shops, has resulted by evolution from this custom. It is worthy of note that, in this country since the Great Rebellion, a blue stripe is frequently added, making the patriotic combination of the "Red, White, and Blue."

The character of the diseases that prevailed in the early days of the colony was substantially the same, though not entirely, as nowadays. It is known that intermittent fever often occurred in certain sections of Massachusetts, where now it is never seen.

The Reverend Mr. Danforth, of Roxbury, during the winter of 1660, makes the following entry in the Church Records: "The Lord was pleased to visite vs, with epidemical colds, coughs, agues, & fevers."—(Page 199.) Under date of September 8, 1671, he says furthermore: "This summer many were visited with y^e ague & fever." And again the next year, September 11, he records: "Agues & fevers prevailed much among vs about y^e Bay, & fluxes & vomiting at Boston." These extracts are taken from the printed edition, previously noticed.

John Josselyn, who has been already mentioned in these pages, wrote "An Account of Two Voy-

ages to New-England," which was published at London in the year 1674. He speaks of arriving at Boston, September 1, 1671, and finding "the Inhabitants exceedingly afflicted with griping of the guts, and Feaver, and Ague, and bloody Flux."—(Page 213.) In another place he says that "the Diseases that the *English* are afflicted with, are the same that they have in *England*, with some proper to *New-England*, griping of the belly (accompanied with Feaver and Ague) which turns to the bloody-flux, a common disease in the Country."—(Page 183.) Joshua Scottow, in his "Old Men's Tears," published in 1691, with a nomenclature more expressive than elegant speaks of the "burning and spotted Fevers, shaking Agues, dry Belly Achs, plague of the Guts, and divers other sore distempers" (page 15), which have afflicted the plantation. The plain Anglo-Saxon word, used as a synonym of the intestinal canal, has gone down in the language, and become indelicate to this generation.

The well ventilated houses of that period, while inviting some disorders, kept off others, and their occupants somehow or other managed to live to a good old age. The men had not as yet acquired the habit of using those rasping liquors, so conducive to renal affections, but contented themselves with honest rum and pure wines, to say nothing of the product of their home-brewing. Small-pox was to them a terror, which has since been deprived of much of its dread. In short, the modifications of disease, as now seen, are due

principally to the different circumstances and habits of life prevailing in the community. The settlers in the main led quiet and unexciting lives; and there was little tendency to those mental disorders which are so characteristic of an active business community. The delicate relations existing between the mind and the body were rarely disturbed by outside influences; and when the manifestation of such a disturbance took place, it was considered a visitation from heaven or the other place, and the treatment was to be found in prayer. If the intellect was beclouded by a haze or excited by illusions, the explanation was sought anywhere but in the right direction. It was not known that there are physical causes for many metaphysical facts.

Twenty years before the outbreak of witchcraft at Salem, a young maiden of Groton was seized with a variety of nervous disorders, constituting a well-marked case of hysteria, which created a great deal of excitement in the town. At the outset it baffled the skill of the neighbors, who were inclined to think that she was possessed of the devil; and the minister was called in, who talked with her and prayed with her, but all to no purpose. A physician was sent for next, "who judged a maine p^t of her distemper to be naturall, arising from the foulnesse of her stomachke & corruptnesse of her blood, occasioning fumes in her braine, & strange fansyes." Finally the poor girl confessed that she had made a covenant with the Devil; and her actions were so strange that

the doctor was nonplussed and threw up the case. He then "consented that the distemper was Diabolical, refused further to administer, advised to extraordinary fasting." A council of ministers was convened to consider the matter, but they did not seem to help her. The poor girl afterward declared that she had signed a league with his black majesty, in her own blood. It is not recorded what became of the girl; but if she had been attacked twenty years later, she would have been tried and hanged as a witch. A long account of the case is given in the *Massachusetts Historical Collections*, fourth series, VIII. 555.

Much of the mist in the medical atmosphere of the colony had been blown from the shores of the mother-country. The credulity of the ignorant was remarkable. In England the touch of the royal monarch,

"Such sanctity hath Heaven given his hand,"

was considered a specific for the King's evil or scrofula. The custom began as early as the reign of Edward the Confessor, and was kept up until that of George I., when it was dropped. At one time a form of prayer used in touching for the evil was inserted in the *Book of Common Prayer*. It is not strange, therefore, that some lingering faith in the absurd custom should crop out in New England. A petition is on file, among the *Massachusetts Archives* (CXXVIII. 270), from a poor man asking the Governor to grant him a *brief*, which is another name for a license to collect money for a specified purpose. It is as follows:—

To his Excellencys S^r Edmund Andrews Cap^t Gen^{rl}l of all his Majesties fforces of New England and Governor of all y^e said Territories

The humble petition of William Hutchins Inhabitant In y^e province of New Hampshrie In New England

Humble Sheweth That y^e Lord hath been pleased through his Righteousn [ess] to visit and correct yo^r poore Supplycant about y^e space [or] terme of Six yeares with vntollerable soors all over his Bo[dy] Not notwithstanding hee hath made vse y^e Most Learned & Scilfulest phisitians that hee could heare off; but found . . . [rem]edy as to his Cure; And Sundry persons Judgment is, that the Lord hath apointed to Salve yo^r much affected Supplycant non but our Gracious Leight the King, Therefore hee and many others Humbly Concaves that It is y^e sors th[at] is Commonly called y^e Kings Evell, And though his affection bee Exceeding Greifeous by his Ilnesse of Body hee would redresse hims selue to o^r Sovereigne Lord y^e King for Remedy not Doubting but God hath apointed him for much good to all his Subjects, and in particular to yo^r poore affected petition^r; but am withhoulden from his goeing to his Majestie, by his Exceeding pouerty; for one affection Seldome comes without Its secound viz^t . . .

Therefore yo^r poore affected petition^r Humbly Beeseeches yo^r Excellency soe to Consider yo^r poore Deploreable and much affected petition^rs Condition; And y^t yo^r Excellency would bee please to Grannt him A Breife; to see what Christian people wilbe please freely to Contribute towards yo^r petition^r transportation And In so Doeing It will oblige him pray for yo^r Excellency health & happynesse and Subscrieb himselfe Yo^r obliged and

Dutyfull Serv^t

June 19, 1688

WILLIAM HUTCHINS.

I introduce the following papers, found among the Massachusetts Archives at the State House, in order to show, in some particulars, the position of medical matters during the early history of the colony. They throw certain side-lights on simple subjects, and help to illustrate the daily affairs of colonial life.

The first is a petition presented to the General Court, in the year 1645. It was written by Dr. Thomas Oliver, a practising physician of Boston, who was a most useful citizen, active both in town

and church matters. In John Hull's Diary, published in the "Archaeologia Americana" (III. 182), it is recorded that "The 1st of the 11th month [January 1, 1657-8], Mr. Thomas Oliver, one of the ruling elders of this church, died, being ninety years old,—a man by his outward profession a chirurgeon."

May it please this honored Court to Consider of y^e Paines and Cost: I haue bin at in dressing. Joseph White of y^e disease called y^e kings evill. w^h hath bine vnder my hand vpon . 20 . months both for sergery . and phisick. y^e disease being in my Judgment hard to be Cured w^t out amputation (w^e y^e boy would never Consent vnto) yet I know not what y^e lord will do in blessing y^e meanes vsed. for he is in good ease for y^e pressant and is able to worke for his liuing and beginne to tread upon his foote

Y^{rs} in all dewty to be cō THO: OLIVER

I would for the time past if it. please you . demand for my Pains and Cost 12 - 00 - 00

The magistrates judge it reasonable that the Petitioner demand should be granted & desire the concurrence of the Deputyes herein

(Massachusetts Archives, c. 10.) JO: WINTHROP: D: GO:

There are other petitions of a similar character, and bills for medical attendance made out against the government, which are on file at the State House. Sometimes such papers were acted on favorably by the public officers, and sometimes not; though I am unable to find out by what authority such accounts were paid, except on the broad ground of Christian charity. As early as the year 1641, the General Court ordered that it would "grant no Benevolence, except in forreign occasions, and when there is Money in the Treasury sufficient, and our debts first satisfied."¹

¹ The General Laws and Liberties of the Massachusetts Colony, page 9.

Another paper of the same import as Oliver's is that of John Endicott, Jr., who gives the items of his bill; and with it are other documents. They are as follows:—

Know all men by theas preasence that I John Clarke beinge very sicke and haue bin with M^r Talor but finding no good, by the Gouerners order was sent to M^r Endecott and through the goodnes of god am recouered out of that disease

As witnes my hand:
the 28 10 67

Joⁿ CLARKE

a poor man one John Clarke being weak and sike by reason of a scuruy and a dropsy, by the Consent of the Gouerner came to me and through the goodnes of god by the use of such means as god ht put in to my heart he is finly recouered out of his diseas

Jo. ENDECOTT Cirurgioⁿ

M Endecott after y^t M^r Taler came to me and gaue him over, did undertake to helpe him, & hath beene at Labor and cost about it and though the disease be treated yet the man wanting good refreshinge is but weake. I desire that M^r Endecott may be . . .

R. BELLINGHAM G.

Debiter to John Endicott for the Cure of J[ohn Clarke,]	
By Conserue de Asinthium	01 00 .
By a Vomit and attendans	00 05 00
By a Cordiall Electuary	00 10 00
By Conserue de Cochlearia	00 10 00
By visets and seuerall other medisense . .	01 00 .
	<hr/>
	03 05 .

Taken out of M^r John Endicotts booke written by him selfe

The Deputyes Judge meete that this bill of 3^{lb} 5^s 0. be payd to the Successor of M^r John Endecott by the Committee appoynted to take care of those poore people, if they haue any Stocke in their hands, or otherwise that it be payd by the Country Treasurer, with refferrence to the Consent of o^f Hon^{ed} magists hereto

18: 8th 1868

WILLIAM TORREY Cleric
not Consented too by y^e Magistrats
p curiam JOHN PYNCHON

but on further Consideration. Judge meet to refeer to the Treasure^r who on Conferenc wth some phisitian may allow him what he see^s Just. their brethren the deputy hereto. Consenting:

EDW. RAWSON Secret

Consented to by the Deputyes WILLIAM TORREY Cleric
(Massachusetts Archives, c. 119-122.)

The following bill gives a fair idea of the fees for visits and the cost of medicines two hundred years ago, when physicians furnished their own drugs. Richard Skinner was a mariner, and it seems that a suit was brought against him, by Dr. Bassett, for medical attendance on his late wife. It is not recorded what was the matter with her, but it is evident that one of her symptoms was constipation.

Novem ^b 23 ^o 1691	Mr Skimmers Bill for medicam ^{ts} Administred to his late Wife	£ s d
Imp ^{ts} One great laxative potion to be taken in two doses .	0 4 0	
24 ^o one laxative Glister	0 2 0	
more another Glister the same day	0 2 0	
more one Great Cordial potion to take at seūall times	0 4 0	
more another great potion to evacuate the humors as aboue	0 4 0	
for diuers visitts to gine orders for her moderating } herselfe in her dyet & other necessarie advice }	0 6 0	
Xem ^b 1 st for one prize Nephritick pills	0 3 0	
more for one Laxatiue ditto	0 3 0	
for another potion more Composed	0 4 0	
10 for a great sudorifiq & divretique potion } against the obstruction of the reines }	0 4 0	
for more vissitts as aboue being in all aboue 40 Times	0 6 0	
for Bloodyng her in the Arme	0 1 0	
Error Excepted in Boston the 26 th Aprill 1692		

PETER BASSETT Doctor

April. 27. 1692 Dr. Peter Bassett made Oath to the Account
above in County Court

Attest JOSEPH WEBB Cler

(Massachusetts Archives, xxxvii. 335.)

The following letter gives a list of medicines that were probably in common use at the time of its date. It was written by Dr. Humphrey Bradstreet,

just after the attack made by the Indians on York, Maine, when there was a large number of English killed, wounded, or carried away by the enemy. Dr. Bradstreet was a young physician, who afterward settled at Rowley, Massachusetts. Some of the names in the list, to say the least, are quaint. *Oleum catellorum* or puppies' oil, as a medicine, has gone out of use, but skunk's oil, rattlesnake's oil, and goose's oil, equally absurd, are all now to be found in the domestic pharmacopœia of many a New-England family. The Latinity of some of the words may be questioned, and it would be difficult to give their modern equivalents. A Latin suffix on an Anglo-Saxon root looks odd, but at the same time *Emplastrum Sticticum* is expressive. The letter contains an expression that has dropped out of the technical language of the profession. After speaking of medicines for "gunn shott wounds as for y^e first intentions," the writer goes on to say that he has some still left that "might be prop^r for y^e last Intentions but not for y^e first." Every physician is familiar with the term *first intention* as applied to the healing of wounds; but *last intention* is now never heard in such cases, though it is easy to see that it means healing by granulation.

Portsm[?] January y^e 26: 169 $\frac{1}{2}$

To the Hon^{ble} the Gouern^r and Councill of y^e Massatuset Collony
in N England

May it please your honours I make bold with all humble sub-
mission to acquaint yo^r Honours that I am altogather out of
Medicens for gunn shott wounds as for y^e first Intentions, and as
wee haue had verry lamentable Incursions soe lately at York and
killing and wounding & Carrying away, as your Hon^{rs} have al-
ready heard wee humbly hope, and how suddainly we may haue
y^e like God only knows—w^{ch} in his Mercie preuent, and should

I be Comma[n]ded to march out with an armie Speedely Such things must be procured but Cannot be had here, and for those few medicens y^t were last sent Some of them might be prop^r for y^e last Intentions but not for y^e first, I haue made bold to Intimate vnderneath what medisens may be proper, humbly subscribe that I am Yo^r Hon^rs most Ready and humbly deuoted Seru^t.

HUMPHRY BRADSTREET.

Electuarium lenitivum	. 2 lb	
Pilulæ Rudii	. . . . . $\frac{1}{2}$ lb	
Olium Catellorium	. . 2 lb	
Olium hypericonis cum guñis	. . . . . 3 lb	
Olium hyperici Simp	. 2 lb	
Olium Terebinthani	. . 2 lb	Emp ^l diachylon Cum guñ 1 lb
Olium Succini	. . . 1 $\frac{3}{4}$	Emp. diacalcitheos . . . 1 lb
Vnguent deminio Suic rubrum Camphra	. 1 lb	Sperrit of wine . . . 1 lb
Vn \ddot{g} album 1 lb Vn \ddot{g} Nicotiana	. . . . 1 lb	Gum Galbanum . . . 4 $\frac{3}{4}$
Vn \ddot{g} dialthea	. . . . 1 lb	gum Elemmi 5 $\frac{3}{4}$
Vn \ddot{g} diapumphologus	. 1 lb	gum Olibanum 4 $\frac{3}{4}$
Vn \ddot{g} populeon	. . . . 1 lb	Gum. Vphorbium 3 $\frac{3}{4}$
Vn: anodinum	. . . . 1 lb	Hordium galicum 6 lb
Vng: Egiptiacum	. . 1 lb	
fflos vnguentorum	. . 1 lb	
Emplast Sticticum	. . 1 lb	
Empla diapallma	. . 1 lb	(Massachusetts Archives, xxxvii. 251.)

The women had their representatives in the profession in olden times as well as in our day, though they were not so strenuous in regard to their political rights as are their modern sisters. Anne Hutchinson was among the earliest of the sisterhood who practised medicine in Massachusetts. She came to Boston in the year 1636, and in "A Short Story," &c., by Thomas Welde (London, 1644), she is spoken of as a person "very helpfull in the times of child-birth, and other occasions of bodily infirmities, and well furnished

with means for those purposes."—(Page 31.) She was a noted character in colonial history, and by her heretical teachings and preachings soon threw the whole settlement into a flame, for which she was subsequently banished.

The town of Rehoboth, Massachusetts, on July 3, 1663, "voted and agreed that [Mrs. Bridget Fuller, of Plymouth,] should be sent to, to see if she be willing to come and dwell amongst us, to attend on the office of a midwife, to answer the town's necessity, which at present is great."—(Bliss's History, page 53.)

Mrs. Fuller was the widow of Dr. Samuel Fuller, one of the Mayflower passengers, who has been mentioned before in these pages. This official invitation, however, was not accepted, as she continued to dwell in Plymouth, where she died some time during the next year. She had learned the art, doubtless, from her husband.

In the Roxbury Church Records, under date of November 27, 1665, Mr. Danforth, the minister, writes:—

"M^r Sarah Alcock dyed, a vertuous woman, of vnstained life, very skilful in physick & chirurgery, exceeding active yea vnwearied in ministering to y^e necessities of others. Her workes praise her in y^e gates."—(Page 203.)

Her husband, like Mrs. Fuller's, was a physician; and he is mentioned in the next paragraph.

Two years later, March 27, 1667, it is recorded in the same book that "M^r John Alcock Physician, dyed. His liver was dried up & become schirrous."—(Page 205.) Possibly an autopsy was made in this case.

The following quaint epitaph is found in the Phipps Street burying-ground at Charlestown, and would seem to indicate that occasionally in early times midwives were commissioned to practise their calling. Some mischievous person has skilfully changed the number on the stone slab, so that 3,000 reads 130,000:—

Here lyes Interred y^e Body of
M^r ELIZABETH PHILLIPS, Wife
to M^r ELEAZER PHILLIPS. Who
was Born in Westminster, in Great
Brittain. & Commission'd by John
Lord. Bishop. of London, in y^e Year
1718 to y^e Office of a Midwife; & came
to this Country, in y^e Year 1719. & by
y^e Blessing of God, has brought into
this world above 3000 Children:
Died May 6th 1761. Aged 76 Years.

In the year 1648 Margaret Jones, of Charlestown, was found guilty of witchcraft; and she was the first person hanged in New England for that offence. She had been a practising physician, and her medicines, according to the best testimony of that period, had "extraordinary violent effects." It was said that "she would use to tell such as would not make use of her physic, that they would never be healed, and accordingly their diseases and hurts continued, with relapse against the ordinary course, and beyond the apprehension of all physicians and surgeons."

In this way she used her powers as a witch to acquire practice and increase her gains; according to the judgment of her contemporaries, she suffered a just penalty of her sins. I wonder much

whether there is any similar travesty of intelligence in our day. The pretensions of the healing mediums and other charlatans suggest an unsatisfactory answer.

Subsequent to this period inquests were held, and *post mortem* examinations made, at various times in Massachusetts during the seventeenth century, and a certain amount of anatomical knowledge was thus picked up. The relative position of the internal organs and their general appearance were learned in this way by the persons who witnessed the operations. The advantages that one may derive from his opportunities depends upon himself alone, and at this late day it cannot be estimated how much the profession gained from these limited sources. No one can tell how far thought in the early dawn of colonial medicine was stimulated by such examinations.

The result of an inquest held June 1, 1676, on the body of Jacob Goodale, is recorded in the Essex County Court Papers (Volume XXX. leaf 46), at Salem, in the complaint against Giles Corey. The jury found—

“seueral wrongs he hath had on his body, as vpon his left arme and vpon his right thigh, a great bruise. wth is very much swold. and vpon the reynes of his backe. in colour. differinge from the other parts of his body we caused an incision to be made much bruised and Run wth a gelly and the skin broke vpon the outside of each buttocke.

Sworne to 30: 4^{mo} 76 ”

This is the case which Cotton Mather mentions in “The Wonders of the Invisible World.”—(Boston, 1693.) It is there stated—

"That about Seventeen Years ago, *Giles Cory* kept a man in his House, that was almost a Natural Fool; which Man Dy'd suddenly. A Jury was Impannef'd upon him, among whom was Dr. *Zorobabel Endicot*; who found the man bruised to Death, and having clodders of Blood about his Heart."—(Page 146.)

In an inquest held May 2, 1678, and recorded in the Essex County Court Papers (Volume XXX. leaf 46), at Salem, the return is made by the "Chirurgeon" that he—

"searcht the Body of one called Edward Bodye: I made Incision upon the parte of his Body which was most suspitious which was upon the Temporall Muscle: I layd the Bones Beare: wee could nott find any fracture in the least nether was the flesh in any wise corrupted or putrified."

An account of an autopsy is given in the Roxbury Church Records. It is found in the printed copy, under date of August 20, 1674, and is as follows:—

"John Bridge, died of y^e Winde Collick and was buried the day following. His body was opened. he had sundry small holes in his stomak & bowels, & one hole in his stomak y^t a man's fist might passe through, w^{ch} is thought was rent wth vyoilent straining to vomit, the night before he dyed, for the watchers observed y^t something seemed to rend wth in him, and he saide of it I am a dead man."—(Page 181.)

This is one of the earliest recorded instances of a *post mortem* examination, to be found in New England.

Josselyn mentions an autopsy which occurred before this one, but he gives no definite facts with regard to it. In "An Account of Two Voyages to New-England" (London, 1674), he speaks of—

"a young maid that was troubled with a sore pricking at her heart, still as she lean'd her body or stept down with her foot to the one side or the other; this maid during her distemper voided

worms of the length of a finger all hairy with black heads; it so fell out that the maid dyed; her friends desirous to discover the cause of the distemper of her heart, had her open'd, and found two crooked bones growing upon the top of the heart, which as she bowed her body to the right or left side would job their points into one and the same place, till they had worn a hole quite through."—(Page 186.)

Chief Justice Sewall in his Diary, September 22, 1676, speaks of an Indian who had been hanged the day before, and dissected on the date of the entry in the journal. The examination was made in the presence of several persons, when one of them—probably Hooper by name—"taking the ♥ in his hand affirmed it to be the stomach."

The earliest treatise on a medical subject, published in this country, was a broadside, 12 inches by 17 in size, written by the Reverend Thomas Thacher, the first minister of the "Old South." It bears date January 21, 1677-8, and was printed and sold by John Foster, Boston. The title is "A Brief Rule To guide the Common People of New England How to order themselves and theirs in the Small Pocks, or Measels." It was intended to furnish some popular hints in regard to the management of this disease, which was then much more prevalent than now. A second edition of this "Brief Rule" was printed in the year 1702.

Dr. Increase Mather wrote a pamphlet entitled "Some further Account from *London*, of the *Small-Pox Inoculated*. The Second Edition. With some Remarks on a late Scandalous Pamphlet Entituled, *Inoculation of the Small-Pox as practis'd in Boston*," &c., Boston, 1721. The first half of this pamphlet appeared originally in "The Boston

Gazette," of February 5, 1721-22, No. 115, covering the third page of the newspaper; and this impression constituted the first edition. Dr. Mather was also the author of a broadside printed at Boston, in November, 1721, giving "Several Reasons proving that Inoculating or Transplanting the *Small-Pox* is a Lawful Practice, and that it has been Blessed by GOD for the Saving of many a Life."

There is "A LETTER, *about a Good Management under the Distemper of the MEASLES*," &c., which was printed without date or signature, some time during the last century. It is mentioned by Dr. Josiah Bartlett, in his historical address delivered before this Society, June 6, 1810, who speaks of it as being "on the files" of the Massachusetts Historical Society, and leaves it to be inferred that it is in manuscript. Dr. Bartlett says that it was written, probably, during the latter part of the seventeenth century, and that "it can be viewed in no other light, than as an ancient curiosity." Several writers of medical history have repeated the same statement. The copy of the "Letter" in the possession of the Historical Society is a small four-page, printed sheet, and its full title is "A LETTER, *about a Good Management under the Distemper of the MEASLES, at this time Spreading in the Country. Here Published for the Benefit of the Poor, and such as may want the help of Able Physicians.*"

It bears the marks of having been folded, and in former times might have been spoken of as "on

the files." It is signed "*Your Hearty Friend and Servant*," and immediately below, the words "Cotton Mather, I guess. by the Style" are written in Dr. Jeremy Belknap's hand-writing. On the authority of this guess it has been ascribed to Dr. Mather; and in the catalogue of ante-revolutionary publications given in the "Transactions" of the American Antiquarian Society, it has been referred to the year 1713 as the date of its appearance, because at that time measles were very prevalent in Boston. An advertisement, however, in "The Boston Evening Post," November 12, 1739, announces this "Letter"—with its long title given exactly—as "Just published," which would seem to fix the time of its appearance. As Mather died February 13, 1728, it is plain that he could not have written it, unless it was a re-publication, of which there is no evidence.

Cotton Mather, however, did write a medical paper entitled "The Angel of Bethesda, An Essay upon the Common Maladies of Mankind," in which he gives a list of "approved remedies for the Maladies, Accompanied with many very practicable Directions for the Preservation of Health." The original manuscript, which was never published in full, is in the possession of the American Antiquarian Society at Worcester. An interesting abstract of it was given by Dr. Joseph Sargent, in the "Proceedings" of that Society, for April 28, 1874. There is internal proof that the essay was completed after the year 1724. It should not be confounded with "The Angel of Beth-

esla, Visiting the INVALIDS of a Miserable WORLD," another tract written by Mather, and published at New London, Connecticut, in the year 1722, but having on the title-page only the signature "By a FELLOW of the ROYAL SOCIETY." There is evidently a connection between the two works, but the manuscript one is fuller and more extensive.

Another medical tract by a minister,—the Reverend Benjamin Colman,—was "Some *Observations* on the *New Method* of Receiving the Small-Pox by *Ingrafting* or *Inoculating*. By Mr. Colman."—(Boston, 1721.) The author shows as much familiarity with the subject as was common among the medical writers of that day. He expresses the opinion that he does not go out of his province in preparing the essay, as his sole purpose is to preserve life and minister to the comfort of families.

The Reverend Thomas Harward, "A Licentiate of the *Royal College*, and Lecturer of the *Royal Chapell* [now King's Chapel], at *Boston*, in *New England*," wrote "Electuarium Novum Alexipharmacum; or, A new Cordial, Alexiterial and Restorative Electuary," which was published at Boston, in the year 1732. The author proposed a much-mixed conglomeration to take the place of mithradate, a still more complicated mass of medicated confusion. He speaks of the electuary as "my own," a form of expression which furnished the origin of the word *nostrum*, meaning *our own* or *my own*.

Dr. Nathaniel Williams, who had been an ordained minister, wrote a medical pamphlet which was printed many years after his death. The title was "The METHOD of Practice in the *Small-Pox*, with Observations on the Way of *Inoculation*. Taken from a Manuscript of the late Dr. NATHANIEL WILLIAMS of Boston in N. E. Published for the Common Advantage, more especially of the *Country Towns*, who may be visited with that Distemper."—(Boston, 1752.) At the end it contains four pages with the heading "Small Pox by *Inoculation*. in 1730." Dr. Williams had a large practice, and, perhaps, belongs rather to the class of physicians.

These instances are enough to show that in former times the ministers took an active interest in medicine, and that some of them wrote practical treatises on the subject.

In the Reverend Thomas Prince's preface to the pamphlet last mentioned, it is stated that Williams studied with "the Learned Dr. James Oliver of Cambridge; one of the most esteemed *Physicians* in his Day; who had a singular Help in the Art of *Chymistry* by the ingenious Dr. Lodowick a *German*, who was also accounted an excellent *Physician*, and the most skilful *Chymist* that ever came into these Parts of *America*." I think that Dr. Lodowick was the same person as Christian Lodowick who wrote a letter to Increase Mather, about the Quakers. It is dated February 1, 1691-2, and was subsequently printed.

The colony and province of Massachusetts suffered severely from the scourge of small-pox, and the epidemics of it were periodical. There was no weapon to fight it, and when once started the dreaded disease burned, like a big fire, until all the material for contagion was used up. The mortality from it was large, and the effect disastrous; and any help was a boon to the community. Under these circumstances the introduction of inoculation for small-pox was a long stride in advance, though it was opposed at the outset in part on religious grounds. It was contended by some that an epidemic was a judgment from God for the sins of a people, and any attempt to avert it was an interference with His prerogative and would provoke Him the more. This view was opposed by others; and Dr. Zabdiel Boylston, who was to be a prominent character in the controversy, wrote at the very beginning of it a pamphlet giving "Some ACCOUNT of what is said of Inoculating or Transplanting the *Small Pox*. By the Learned Dr. *Emanuel Timonius*, and *Jacobus Pylarinus* with some Remarks thereon. To which are added A Few *Querries* in Answer to the *Scruples* of many about the *Lawfulness of this Method*."—(Boston, 1721.)

The Reverend William Cooper, of Boston, wrote "A Reply to the *Objections* made against taking the *Small Pox* in the Way of *Inoculation* from *Principles of Conscience*. In a Letter to a Friend in the *Country*." I have been unable to find the first edition of this pamphlet, but the third was

published at Boston, in the year 1730. The preface, signed by W. Cooper, is dated March 4, 1729-30; and in it he says that "The following Letter was wrote and publish'd more than eight Years agoe, when the Town was in great Distress by the spreading of the Small Pox." He adds also that "Soon after the following Letter was printed here in Boston, it was reprinted in London, together with the Reverend Mr. Colman's Account of the Method and Success of this Practice; to which was prefix'd an historical introduction by the Reverend Mr. Neal."

The introduction of variolous inoculation was the most important event in the medical history of the province; and in promoting it the ministers took a leading part. It occurred in the summer of 1721, when there was not a single practitioner of medicine in Boston, with the exception of Dr. William Douglass, who was a regularly graduated physician. Some of the ministers were the peers of the doctors in medical knowledge, though with less clinical experience. In this state of affairs, it can readily be understood that it was a free fight, whenever there was a medical controversy. Dr. Douglass, the leader of the opponents of inoculation, was a Scotchman who came to Boston in the year 1718. He received his medical education in Paris and Leyden; was a man of fine intellectual parts and a versatile writer. He knew astronomy and could calculate eclipses; he had a taste for natural history, and was withal an excellent botanist. He studied his medical cases, and

took careful notes by the bedside. With a large practice, he wrote on a great variety of subjects, and it is not strange that occasionally he was inexact in his statements. It was wittily said of him by some one that he was always positive and sometimes accurate. He had little tact, and it is not surprising that he found himself continually in controversy. He died on October 21, 1752, having passed his whole professional life in Boston, where he had much influence as a physician.

The credit of the introduction of inoculation into this country is generally given to Cotton Mather, who had read in the Philosophical Transactions of the Royal Society at London, that this method was used in Turkey as a means of protection against small-pox. During a long time the practice had been kept up in Constantinople, where it was brought from Asia, and had met with much success. Dr. Mather was impressed with the importance of the method, and tried to interest the Boston doctors in the subject.

With one exception, however, they seemed to be either indifferent or opposed to the whole matter. This exception was Dr. Zabdiel Boylston, who took up the practice of it amid the most violent opposition of his professional brethren; and on the 26th of June, 1721, he inoculated his own son, Thomas, six years of age, his negro man, Jack, of thirty-six years, and a little negro boy, of two and a half years. They all had the disease very lightly, and he was encouraged to try the experiment on others. In his judgment the safety and

value of the operation were soon established; but the medical profession were sceptical, and their opposition strong and bitter. With Dr. Douglass at their head they talked against it, and wrote against it; and moreover they had the newspaper press on their side. Opposed to them were Dr. Boylston and the ministers, who at last carried the day. At one time the public feeling was so excited that the advocates of the practice were not safe even in their own houses. The town was patrolled by the rabble with halters in their hands, threatening to hang Dr. Boylston—if they could find him—to the nearest tree.

An attempt was made early in the morning of November 14, 1721, by means of a "Fired Granado" to destroy the house of Cotton Mather, who had at the time a kinsman living with him, and under his charge for inoculated small-pox. Fortunately the fuse was shaken out of the shell, and no serious damage done. A full account of the affair is given in "The Boston News-Letter," November 20, 1721, which says that—

"When the Granado was taken up, there was found a paper so tied with a Thread about the Fuse, that it might outlive the breaking of the Shell; wherein were these Words: *COTTON MATHER. I was once one of your Meeting; But the Cursed Lye you told of — — You know who; made me leave You, You Dog, And Damn You, I will Enoculate you with this, with a Pox to you.*"

Of the Boston newspapers "The New England Courant," edited by James Franklin, was particularly hostile to the new method. The editor was an elder brother of Benjamin, at this time the embryonic philosopher, who also worked on the

paper both as a compositor and writer. Within the period of one year Dr. Boylston inoculated 247 persons, and of this number only six died; and during the same time 39 other persons in the neighborhood were inoculated by two other physicians, and all made good recoveries. This low rate of mortality, as compared with that among persons who had taken small-pox in the natural way, was a telling argument in favor of inoculation. The array of these statistics carried the public to the side of Dr. Boylston, who was now honored to the same degree that he had previously been libelled by a fickle populace. He was invited by Sir Hans Sloane, the Court Physician, to visit London, where he received the most flattering attentions from the scientists of England, as well as from the reigning family. He was chosen a member of the Royal Society, and read a paper before that learned body, on the subject of small-pox inoculation in New England. This was published in London in the year 1726, and dedicated by permission to the Princess of Wales. In this pamphlet he gives a minute account of many of his cases, telling the names of his patients in full, besides stating their ages; and in the preface he apologizes for the liberty he has taken in doing so. A second edition of this pamphlet was published at Boston, in the year 1730. In the course of time inoculation conquered all opposition, and finally became a well established fact in the community. Some of those who had bitterly opposed it were now its warmest friends. Notably among them was Dr. Benjamin

Franklin; and in the small-pox epidemic of 1752, even Dr. William Douglass both practised inoculation and spoke of it as a "most beneficial Improvement." In writing on the subject he expresses himself "at a loss for the Reasons, why Inoculation hitherto is not much used in our Mother Country, *Great Britain*; considering that it has with good Success been practised in our Colonies or Plantations."¹ During three quarters of a century the practice was continued, until it was superseded by the great discovery of Jenner.

It is worthy of note that the introduction here of variolous inoculation was hardly two months after it had been successfully tried in England, though Dr. Boylston and his coadjutors had no knowledge of the fact. Small-pox spread with such fury and fatality during the summer of 1721, that the Massachusetts Legislature passed a resolve—applicable, however, only to the town of Boston—that no bell should be tolled for the burial of persons who had died of the disease, except such as the selectmen of the town should direct. And, pursuant to this resolve, it was ordered September 21, 1721, "That one Bell only be made use of for a Funeral and that to be Tolled but Twice, each Tolling not to exceed the space of Six Minutes." The following clause also was added, as a snapper, showing that the race prejudices of a century and a half ago pursued the innocent victims even after life had left the body: "Further that there be but one Tolling of a Bell for the

¹ Douglass's Summary, ii. 412.

Burial of any *Indian*, *Negro* or *Malatto*, and that they be carried the nearest way to their Graves."

The next excitement in the medical history of Massachusetts was an epidemic that raged in Boston and its neighborhood, and excited great consternation. This was described at the time by Dr. Douglass, a close observer in such cases, who wrote a good account of it. The title of this pamphlet, which has already been mentioned in page 8, is: "The Practical HISTORY of A New Epidemical Eruptive Miliary Fever, with an Angina Ulcerosa which Prevailed in *Boston* New England in the Years 1735 and 1736."—(Boston, 1736.) The diagnosis was rather obscure, and the disease baffled the skill of the physicians. "It was vulgarly called the *Throat Illness*, or a *Plague in the Throat*, and alarmed the Provinces of New-England very much." Dr. Thacher, in his account of Douglass in the "American Medical Biography," calls the disease by the name of *angina maligna*, which is a generic term and includes any inflammatory affection of the throat or fauces, such as quinsy, malignant sore-throat, croup, or mumps. It has been considered also to be scarlatina; but the description leaves little doubt in my mind that the diagnosis at the present time would be diphtheria. Dr. Douglass's essay was republished in "The New-England Journal of Medicine and Surgery" (Boston, 1825), with an editorial note that "it has been pronounced by competent judges

one of the best works extant upon the subject of which it treats" (XIV. 1-13).

The disease was so malignant and the public so much alarmed, that the town of Boston, in its corporate capacity, took action in the matter; and the following circular in "The Boston Weekly Newsletter," April 29, 1736, will explain itself:—

THE *Select-Men* of the Town of Boston, in order to inform the Trading Part of our neighbouring *Colonies*, concerning the State of the present *prevailing Distemper* in this Place, did desire a Meeting of as many of the *Practitioners in Physick* as could then be conveniently obtain'd. The Practitioners being accordingly met, did unanimously agree to the following *Articles*;

1. THAT upon the first appearance of this *Illness* in Boston the *Select-Men* did advise with the *Practitioners*; but they at that Time having not had Opportunities of observing the Progress of the *Distemper*, it was thought advisable (until further Experience) to shut up that *Person* who was supposed to have received it in *Exeter* to the Eastward; upon his Death the Watch was soon removed, but no *Infection* was observed to spread or catch in that Quarter of the Town; therefore no Watches were appointed in the other Parts of the Town where it afterwards appeared, the Practitioners judging it to proceed from some *occult Quality in the Air*, and not from any observable *Infection communicated by Persons or Goods*.

2. THE *Practitioners* and their Families have not been *seized* with this *Distemper* in a more *remarkable* manner (and as it has happened not so much) than other Families in Town, even than those Families who live in solitary Parts thereof.

3. AS to the *Mortality* or *Malignity* of this *Distemper*, all whom it may concern are referred to the *Boston Weekly-Journal of Burials*: by the Burials it is notorious, that scarce any *Distemper*, even the most favourable which has at any Time prevail'd so generally, has produc'd fewer Deaths.

4. AS formerly, so now again after many Months Observation, we conclude, That the present *prevailing Distemper* appears to us to *proceed from some Affection of the Air, and not from any personal Infection receiv'd from the Sick, or Goods in their neighbourhood*.

NATHANIEL WILLIAMS
WILLIAM DOUGLASS
JOHN CUTLER
HUGH KENNEDY
WILLIAM DAVIS
THOMAS BULFINCH.

Nathaniel Williams, whose name heads the signatures, was an active and useful man in his day and generation. In the affairs of life he performed the triple *rôle* of preacher, doctor, and school-master. The union of these three characters was no infrequent occurrence in former times. In each he appears to have played well his part ; and his career entitles him to more than a passing notice. He was the son of Nathaniel and Mary (Oliver) Williams, and was born in Boston, August 23, 1675. He graduated at Harvard College in the class of 1693, and in the summer of 1698 was ordained,—according to the sermon preached at his funeral by Thomas Prince,—“an EVANGELIST in the *College-Hall*, for one of the *West India Islands*. But the climate not agreeing with his Constitution, He soon returned to this his *native City*.” At one time he was engaged in giving private instruction to boys, and he had the reputation of being an excellent classical scholar. In the year 1703 he was appointed usher at the Free Grammar School, now known as the Boston Latin School; and subsequently, in 1708, he was chosen to the mastership, which position he held until 1734. He studied “*Chymistry* and *Physick*, under his Uncle the Learned Dr. *James Oliver of Cambridge*; one of the most esteemed *Physicians* in his Day;” and even while teaching continued to practise his profession of medicine. He died January 10, 1737-38; and “The Boston Weekly News-Letter” of January 12 calls him “the Reverend and Learned Mr. *Nathaniel Williams*,” and speaks of him “as

a very skilful and successful *Physician*;" and says that "as his Life has been very extensively serviceable, so his Death is esteemed as a public Loss." A posthumous pamphlet by him has been previously mentioned in page 62 of this Address.

The career of Dr. William Douglass has been already noted.

John Cutler was the son of John Cutler, and born August 6, 1676, at Hingham. The father was a "chirurgeon," and served in King Philip's War. He came originally from Holland, where his name was written Demesmaker. On coming to this country he adopted the English translation of his Dutch patronymic, and called himself Cutler; and ever afterward the family was so designated. His marriage is thus given in the town-records of Hingham:—

"Johannes Demesmaker, a Dutchman (who say his name in English is John Cutler) and Mary Cowell the daughter of Edward Cowell of Boston were marryed by Captaine Joshua Hobart on the fourth day of January 1674."

The births of seven children are also recorded in the same records. I give the entries of the two oldest and the two youngest of these children, as they show how the distinction between the names was made at the outset, and that it was dropped in the course of time. The oldest child was John, who became the physician and signed the circular relating to the epidemic.

"Johannes Demesmaker, whose name in English is John Cutler, the son of Johannes Demesmaker a Dutchman and of Mary his wife was born on the sixth day of August 1676."

"Peter Demesmaker (the son of Johannes Demesmaker a Dutchman & of Mary his wife an English woman) was born on the seventh day of July 1679."

"David Cutler, y^e son of Doctor John Cutler & of Mary his wife was born the first of November 1689."

"Ruth Cutler the daughter of Doctor John Cutler & of Mary his wife was born y^e 24th of February 169 $\frac{1}{2}$."

The father removed to Boston about the year 1694, and lived in Marlborough Street, now a part of Washington Street, near the Old South Meeting-house. He had a large practice, and was the preceptor of Dr. Zabdiel Boylston, who afterward became famous during the time of the small-pox inoculation. He died probably in the winter of 1717, and his son, John, Jr., inherited his practice as well as the homestead. The son married the widow, Mrs. Joanna (Dodd) Richards; and he was actively connected with the King's Chapel, of which church he was a warden. He died September 23, 1761, having lived a long life of usefulness.

It requires no great stretch of the imagination to suppose that Hugh Kennedy, the fourth signer of the circular, was a Scotchman.

Of William Davis, the next signer, I can learn almost nothing. He died probably in the winter of 1746, as the bond given by the administratrix of the estate was dated March 28, 1746. An inventory of his property contained among the items "Druggs [£] 284: 4: 4;" "Chirurgical Instrum^{ts} of all Sorts 120;" "3 Glass Cases of Veins & Anat: 50." This appraisal was made according to the paper money of New England, which at that time was much depreciated; and it would be difficult to calculate the gold value.

Thomas Bulfinch, the last signer, was the son of Adino Bulfinch, a merchant of Boston, who came

to this country from England about the year 1680. The son was born in 1694, and began the study of his profession with Dr. Zabdiel Boylston as his preceptor. He afterward went to London and received instruction in anatomy and surgery under the famous Cheselden, and subsequently to Paris, where he completed his professional education. On his return to Boston he married a daughter of John Colman, at that time a prominent merchant; he soon acquired the reputation of an excellent physician, and enjoyed a very large practice. He died December 2, 1757, leaving a son, Thomas, Jr., who followed in the footsteps of his father as a successful practitioner.

The first inoculating hospitals in the neighborhood of Boston—one at Point Shirley and the other at Castle William, now Fort Independence—were opened in the winter of 1764, during an epidemic of small-pox. The Point Shirley hospital was established by the Governor of the Province, with the advice of the Council, and placed under the charge of several physicians. A notice in “The Boston Post-Boy & Advertiser,” March 19, 1764, sets forth that—

“ Those Physicians of the Town of *Boston* who are engaged in carrying on the inoculating Hospital at *Point-Shirley*, being prevented giving their constant Attendance there during the continuance of the *Small-Pox* in Town, hereby notify the Public, that they are join’d by Doctor *Barnett* of *New-Jersey*, who will constantly attend at said Hospital with one or other of said Physicians whose Business will permit, and employ the utmost Diligence and Attention for the relief of those that put themselves under their care. They further notify, that *Point-Shirley* contains as many comfortable and decent Houses as will be sufficient to accommodate as many Persons as will probably ever offer for Inoculation at one Time, from this or the neighbouring Governments and

is well furnished with every requisite Convenience both for Sickness and Health."

Dr. William Barnett lived at Elizabethtown, New Jersey, and had acquired considerable reputation in Philadelphia as a promoter of variolous inoculation.

The Castle William hospital was opened—to quote from "The Boston Post-Boy & Advertiser," February 27, 1764—

"In order to enlarge the Conveniences for Inoculation in addition to those already proposed at Point-Shirley, that every Person desirous of undergoing that Operation may have an Opportunity of doing it, without endangering the Spreading the Distemper, and that this Town may be, as soon as possible, freed from the apprehension of the Small-Pox; the Governor has consented that the Barracks of *Castle-William* shall be improved for the Purpose of Inoculation, from this Time into the Middle of *May* next. And the said Barrack are now opened to ALL PHYSICIANS having Patients to Inoculate, under such Rules as shall be thought proper to be made for that purpose.

"There are in the Barracks 48 Rooms, each of which will contain ten Patients conveniently."

The following advertisement in the same newspaper, of March 5, 1764, furnishes the principal details of its administration:—

DR. SAMUEL GELSTON

Gives this Publick Notice to his Patients in *Boston* and the adjacent Towns, that he has prepared (by Permission of his Excellency the Governor) all comfortable Accommodations for them at the Barracks at *Castle-William*, in order to their being inoculated for the Small-Pox under his immediate Care.

N. B. His Rooms are in that Part of the Barracks where the Patients of Dr. *Nathaniel Perkins*, Dr. *Whitworth* and Dr. *Lloyd's* are received.

Dr. *Gelston* and Dr. *Warren* reside at *Castle-William* Day and Night.

ALL Persons inclined to go to the Barracks at *Castle-William* to be inoculated where Dr. *GELSTON* resides, may apply to Dr. *LLOYD* at his House near the King's Chapel, who will provide them a Passage to the *Castle*.

Dr. Gelston was a physician of Nantucket, and had previously managed a small-pox hospital at Martha's Vineyard, where he had successfully inoculated eighty-one persons. There were at this time several private establishments in the town at which inoculation was carried on.

It is said that many came to Boston from all parts of the Province, and from other colonies, to be treated in these hospitals. During a period of five weeks after they were first opened, it is estimated that more than 3,000 persons received the disease; and not a fatal case among them. "The Boston Post-Boy & Advertiser," April 16, 1764, is my authority for the statement.

It was during this epidemic that the library of Harvard College was burned on the night of January 24, 1764. The fire occurred in vacation time, and while the building was used by the General Court, which was then sitting temporarily in Cambridge, on account of the small-pox in Boston. Among the losses a contemporaneous account mentions—

"A collection of the most approved medical Authors, chiefly presented by Mr. James, of the island of Jamaica; to which Dr. Mead and other Gentlemen have made very considerable additions: Also anatomical cutts and two compleat skeletons of different sexes. This Collection would have been very serviceable to a Professor of Physic and Anatomy, when the revenues of the College should have been sufficient to subsist a gentleman in this character."—("The Boston Post-Boy & Advertiser," January 30, 1764.)

The allusion contained in the last paragraph seems to indicate that the question of a medical professorship in the college had been broached

before this time. Even in the earliest days of the institution a certain amount of instruction had been given in medicine. Small though it was, it is not for us to despise its influence. Johnson, in his "Wonder-Working Providence" (London, 1654), — written about the year 1650, — describes the College at a period near that time, and says that "some help hath been had from hence in the study of Physick." — (Page 165.) It is very likely that Cambridge was the place where Giles Firmin taught anatomy, as mentioned in page 31 of this Address.

An inoculating hospital was opened on Cat Island, near Marblehead, about the middle of October, 1773. It was known as the Essex Hospital, and had accommodations for eighty patients. It was a private affair, owned by proprietors, though it was "approved by the Gentlemen Select-Men of Salem and Marblehead." An excellent code of regulations, which were to govern it, is found in "The Essex Gazette," October 5, 1773. It was not destined to last long, however, as it was burned by some ruffians on the night of January 26, 1774. There had been a strong feeling against the hospital on the part of the inhabitants; and a few days before the burning, four men suspected of carrying the infection were tarred and feathered, and drummed out of town. It was estimated that there were one thousand persons in the procession escorting the victims. The mob marched to Salem, four miles distant, and then paraded through the

principal streets of this town. A Salem newspaper of that time heartlessly remarks that—

“the exquisitely droll and grotesque appearance of the four tarred and feathered Objects of Derision, exhibited a very laughable and truly comic Scene.”

Two of the ringleaders of the mob which destroyed the hospital were arrested on February 25, and confined in the jail at Salem, whence they were rescued by another mob, and taken back to Marblehead. The popular feeling was with the rioters, and it was found impossible to bring the ruffians to justice; and so the matter ended.

As early as March, 1761, Dr. Sylvester Gardiner had made a proposition to the town of Boston to build at his own cost an inoculating hospital on a piece of land, northward from the building which he had previously put up during the French war, for sick and wounded sailors; but it does not appear that the offer was accepted. In the account, as printed in the “Proceedings of the Massachusetts Historical Society,” for June, 1859, it is stated that—

“No person in town is to pay more than four dollars for inoculation, medicines, and attendance, and three dollars per week for diet, nursing, and lodging, during his or her illness.”

It was during the Revolution that dentistry, a kindred art to medicine, began to be practised. It sprang from a humble beginning, but it has grown to large proportions. With its advanced schools, as a twin sister of the medical profession it challenges our attention and respect. Some of its teachers, by their thorough work and patient in-

vestigations, have written their names on the roll of science, and placed the present generation under lasting obligations. Many of its number are graduates of medicine; and I have not forgotten the fact that two of the principal founders, as well as professors, of the Harvard Dental School, Dr. Nathan Cooley Keep and Dr. Thomas Barnes Hitchcock, who are now no longer living, received their professional degrees at the Harvard Medical School, and both were members of this distinguished Society.

The following advertisements, taken from two Boston newspapers, printed a century ago, will give an insight of dentistry at that time:—

Gentlemen and Ladies that may want Artificial Teeth, may have them made and fixed in the neatest manner, without the least pain by ISAAC GREENWOOD, Ivory-Turner, at his house in the Main Street, between the Old South and Seven-Star Lane, at the South-End of BOSTON; they help the Speech as becoming as the natural ones.

 *Ladies, wax rots your Teeth and Gums, throw it away. Come and have your Teeth cleansed, and if done in time, saves them from rotting and parting from the Gums.*

N. B. Said GREENWOOD continues to make Artificial Leggs and Hands: Turns in Ivory, Bone, Silver and Wood: Makes Fifes, German-Flutes, Hautboys, &c. &c.

 *Ladies please to send your Umbrilloes to be mended and cover'd—* ("The Continental Journal and Weekly Advertiser," April 20, 1780.)

Isaac Greenwood was the father of John Greenwood, a dentist of repute in New York who made a set of teeth for General Washington about the time Stuart painted his portrait. In many of the engravings of Washington it is common to see a fulness about the mouth, which is due to the

artificial set. At that period, false teeth were kept in position either by springs or clasps; and the principle of holding them in place by atmospheric pressure was not understood.

MR. TEMPLEMAN,

SURGEON DENTIST,

Incouraged by the success of his practice in different parts of Europe and America, begs leave to acquaint the public, That he is furnished with materials with which, and a dexterity peculiar to the art,

He preserves the Teeth,
Cures the scury in the Gums,
Extracts and transplants Teeth,
Scales Teeth,
Substitutes artificial Teeth,
Gives the Teeth proper vacancies,
Regulates childrens Teeth,
And plumbs concave Teeth,

which prevents their colluting or being offensive, besides many other operations too tedious to mention, as without the least pain (except that of extracting) since scaling the Teeth is carefully to take from them an infectious tartar which destroys the animal [enamel?], eats the gums, renders them spungy *ULCERATED*, and incapable of affording any support. Its being removed, which is not in the power of composition to effect, renders the gums firm, and leaves the teeth in their natural purity. Many people blame the climate, &c. for the loss of Teeth,—But it is too often the case, as I've observ'd in the course of my practice on the Continent, that but few people take care of their Teeth, till they become defective. The Europeans are remarkable (particularly the French) for their good and beautiful Teeth, owing to their own care, and knowledge of the art.

N. B. Mr. TEMPLEMAN will, with pleasure, attend those Ladies or Gentlemen who cannot conveniently wait on him at Mrs. Frazier's, near the Town-House, Boston.—("The Boston Gazette and The Country Journal," October 8, 1781.)

During the generation immediately preceding the Revolution, the science of medicine in Massachusetts was making progress by slow but steady steps. The bond of union with the clerical pro-

fession, existing from the earliest days of colonial life, had been cut; and there was no longer any practical connection between the two callings. Medicine had passed through the creeping stage, and was now beginning to walk alone. It was a long stride in advance when men began to turn their studies in one direction, and to make a specialty of general practice. The opportunities, however, were few for the successful prosecution of this object. There were neither medical schools nor hospitals; and the young men were obliged to pursue their studies under the guidance of practising physicians. Frequently they were bound out, like apprentices, to their instructors, and were compelled to do all sorts of chores around the house and barn, as well as the professional drudgery. In those days the physicians used to buy their own drugs and prepare their own medicines; and it was the province of the students to pound the bark and spread the plasters, as well as to mix the ointments and make the pills. In short they were to be useful to their employers, as best they might in any way, whether in bleeding patients, pulling teeth, or attending to other cases of minor surgery. Sometimes they boarded with their masters, being inmates of their families; and occasionally they formed alliances and attachments which lasted beyond the period of their studies. Instances might be given where the instructor watched the development of a fledgling doctor with all the interest of a father-in-law. It was customary for physicians in their daily rounds of practice to be

accompanied by their scholars, in order to show them the different forms of disease, and to teach them the rules of diagnosis. On their return home the young men would sometimes undergo a form of questioning, which was considered an examination. In this way, with a certain amount of medical reading, the main supply of doctors was kept up. The few exceptions were persons who went abroad to study, where of course they had the best opportunities that science could then give. On coming back to their native land, such students brought with them the freshest ideas and the latest expression of medicine, which they were not slow to impart to others. Aside from these advantages they returned with a diploma and had the right to affix M.D. to their names, an honor beyond the reach of those who had remained at home.

Among the physicians of this period who had not the benefit of a foreign education, but who acquired a high professional skill and a wide local reputation,—and who withal were early members of this Society,—may be mentioned:—

Samuel Adams, of Boston; Israel Atherton, of Lancaster; Joshua Barker, of Hingham; Timothy Childs, of Pittsfield; John Cuming, of Concord; John Flagg, of Lynn; Nathaniel Freeman, of Sandwich; Lemuel Hayward, of Boston; Samuel Holten, of Danvers; Ebenezer Hunt, of Northampton; Thomas Kittredge, of Andover; Oliver Prescott, of Groton; Nathaniel Saltonstall, of Haverhill; Micajah Sawyer, of Newburyport;

Marshall Spring, of Watertown; John Barnard Swett, of Marblehead; the brothers Simon and Cotton Tufts, of Medford, and Weymouth, respectively.

These were all marked men in their day and generation. They were in active practice one hundred years ago, and at that time were sustaining a part in the daily affairs of New England life, which was not surpassed in responsibility and usefulness by that of the same number of persons in any walk or profession. They were in every sense of the word general practitioners, as specialties in medicine were then unknown. Most of them lived at some distance from other physicians, and in cases of emergency they were obliged to rely on themselves alone. This experience made them symmetrical men; they were developed in all branches of medicine and on all sides of practical questions, as far as science had then gone.

The physicians of this period who had studied their profession in Europe were few in number. Notably among them were Charles Jarvis, John Jeffries, and James Lloyd, all of Boston, and members of this Society. Jarvis was a Boston Latin School boy, and a graduate of Harvard College in the class of 1766. After finishing his medical studies in Boston, he went to England, and took practical courses in medicine and surgery. On his return he established himself in Boston, where he enjoyed a large and successful practice. Dr. Jarvis gave but little medicine, and to-day would be considered a good representative of the "expectant school"

of the profession. He took a prominent part in public affairs, and was a "Jeffersonian" in politics. He died November 15, 1807, aged fifty-nine years.

John Jeffries was the son of David Jeffries, for thirty-one years the town treasurer of Boston. The son graduated at Harvard College in the year 1759, with the highest honors of his class, and began at once his medical studies under Dr. Lloyd. Subsequently he studied in England, and took his degree of M.D. at the University of Aberdeen in Scotland. During the Revolution he served on the British side, and it was not until the year 1790 that he returned to his native town to practise his profession. He died September 16, 1819, deeply lamented by his friends.

James Lloyd was a native of Oyster Bay, Long Island, where he was born March 14, 1728. He began his professional studies in Boston, under the guidance of Dr. William Clark, with whom he remained nearly five years. At the end of this time he went to England, where he enjoyed the most favorable opportunities of seeing the practice of the best physicians and surgeons of that time. He came back to Boston in the year 1752, and at once entered upon the duties of his chosen profession, in which he soon became eminent. He has the name of being the first educated obstetrician in the country, as well as the credit of introducing the practice of amputation by the flap operation, or double incision, as it was then called. Dr. Lloyd was a man of many accomplishments, and during the last half of the last century the

prominent figure of the profession. He died March 14, 1810, at the advanced age of eighty-two years.

Dr. Lloyd had studied midwifery under the distinguished Smellie, of London; and after his return home he was considered throughout the province the best authority in this branch of medicine. Before this period midwifery had been practised almost exclusively by women, and physicians were summoned only in difficult cases. At the time of the incorporation of this Society, the practice of obstetrics among physicians had become quite general in the larger towns of the State.

The following advertisement, in "The Boston Evening Post and The General Advertiser," November 10, 1781, announces that after that date the terms of the Boston doctors would be—to use a current expression of the shop—cash on delivery:—

THE PHYSICIANS
of the Town of BOSTON,

HEREBY inform the Public, that, in Consideration of the great Fatigue and inevitable Injury to the Constitution, in the Practice of MIDWIFERY, as well as the necessary Interruption of the other Branches of their Profession, they shall, for the future, expect, that in Calls of this Kind, the FEE be immediately discharged.

BOSTON, Nov. 6, 1781.

A work on Obstetrics—probably the first one printed in the country—was published at Boston in the year 1786. It was profusely illustrated with engravings; and the title-page reads as follows:—

"An Abridgement of the Practice of Midwifery: and a set of Anatomical Tables with explanations. Collected from the Works of the Celebrated W. Smellie, M.D. A new Edition. Boston: Printed & sold by J. Norman at his office near the Boston-Stone."

II.

Thus far in these pages I have tried to sketch the rise and progress of medicine in Massachusetts during the colonial and provincial periods; and this imperfect outline of its history may give some idea of the antecedents and traditions of the Medical Society. The corner-stone was laid on such a ground-work; the structure was built on such a foundation. It was so planned that additions and changes might be made to meet the wants of advancing time, and not weaken the unity or symmetry of the whole. The workmen were earnest and honest, and the result proves their faithful labor. They have erected an edifice which has stood the test of a century, and seemingly bids fair to last for ages to come.

I now purpose to trace in some detail the development of the Society from its beginning one hundred years ago, to the present time.

Civil commotion stirs up thought and quickens mental activity. When the first steps were taken to establish this Society, the surrender of Yorktown had not occurred, and it was a matter of grave doubt when the Revolution would come to an end; but a six years' war had drilled the popular mind in great things. The uncertainty of public affairs tended rather to excite effort than to repress it. In such a time and under such conditions the

Massachusetts Medical Society was organized. It was no small affair to bring together from all parts of the Commonwealth the representatives of the medical profession, and to harmonize their conflicting views. Berkshire county was two days distant from Boston, and relatively as far off as Chicago and St. Louis are to-day; while that large northeast territory, called the District of Maine, was as little known as the farthest northwest region is known to us now. Between the different sections of the State there were then small conveniences for general travel, and few postal facilities, by means of which an interchange of visits and ideas, so conducive to unification of action, could be brought about. The formation of this Society at once increased professional intercourse, in spite of these difficulties, and accomplished excellent results.

The Act of Incorporation, under which this Society first met one hundred years ago, is found in the first volume of its "Communications" (pages viii–xi), and is as follows:—

COMMONWEALTH *of* MASSACHUSETTS.

In the Year of our Lord, 1781.

AN ACT to incorporate certain PHYSICIANS, by the Name of *The Massachusetts Medical Society.*

As health is essentially necessary to the happiness of society; and as its preservation or recovery is closely connected with the knowledge of the animal economy, and of the properties and effects of medicines; and as the benefit of medical institutions,

formed on liberal principles, and encouraged by the patronage of the law, is universally acknowledged :

*Be it therefore enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, That, Nathaniel Walker Appleton, William Baylies, Benjamin Curtis, Samuel Danforth, Aaron Dexter, Shirley Erving, John Frink, Joseph Gardner, Samuel Holten, Edward Augustus Holyoke, Ebenezer Hunt, Charles Jarvis, Thomas Kast, Giles Crouch Kellogg, John Lynn, James Lloyd, Joseph Orne, James Pecker, Oliver Prescott, Charles Pynchon, Isaac Rand, Isaac Rand, jun. Micaijah Sawyer, John Sprague, Charles Stockbridge, John Barnard Swett, Cotton Tufts, John Warren, Thomas Welsh, Joseph Whipple, William Whiting, be, and they hereby are formed into, constituted and made a body politic and corporate, by the name of *The Massachusetts Medical Society* ; and that they and their successors, and such other persons as shall be elected in the manner hereafter mentioned, shall be and continue a body politic and corporate by the same name forever.*

And be it enacted by the authority aforesaid, That the fellows of said society may from time to time elect a president, vice president and secretary, with other officers as they shall judge necessary and convenient; and they the fellows of said society, shall have full power and authority, from time to time, to determine and establish the names, number and duty of their several officers, and the tenure or estate they shall respectively have in their offices; and also to authorize and empower their president or some other officer to administer such oaths to such officers as they, the fellows of said society, shall appoint and determine for the well ordering and good government of said society, provided the same be not repugnant to the laws of this commonwealth.

And be it enacted by the authority aforesaid, That the fellows of said society shall have one common seal, and power to break, change and renew the same at their pleasure.

*And be it enacted by the authority aforesaid, That they, the fellows of said society, may sue and be sued in all actions, real, personal or mixed, and prosecute and defend the same unto final judgment and execution, by the name of *The Massachusetts Medical Society*.*

And be it enacted by the authority aforesaid, That the fellows of said society may from time to time elect such persons to be fellows thereof, as they shall judge proper; and that they, the fellows of said society, shall have power to suspend, expel or disfranchise any fellows of said society.

And be it enacted by the authority aforesaid, That the fellows of said society shall have full power and authority to make and enact such rules and bye laws for the better government of said

society, as are not repugnant to the laws of this commonwealth; and to annex reasonable fines and penalties to the breach of them, not exceeding the sum of *twenty pounds*, to be sued for and recovered by said society, and to their own use, in any court of record within this commonwealth proper to try the same; and also to establish the time and manner of convening the fellows of said society; and also to determine the number of fellows that shall be present to constitute a meeting of said society; and also, that the number of said society, who are inhabitants of this commonwealth, shall not at any one time be more than seventy, nor less than ten; and that their meetings shall be held in the town of *Boston*, or such other place within this commonwealth, as a majority of the members present in a legal meeting, shall judge most fit and convenient.

And whereas it is clearly of importance, that a just discrimination should be made between such as are duly educated and properly qualified for the duties of their profession, and those who may ignorantly and wickedly administer Medicine, whereby the health and lives of many valuable individuals may be endangered, or perhaps lost to the community:

Be it therefore enacted by the authority aforesaid, That the president and fellows of said society, or other such of their officers or fellows as they shall appoint, shall have full power and authority to examine all candidates for the practice of physic and surgery, (who shall offer themselves for examination, respecting their skill in their profession) and if upon such examination, the said candidates shall be found skilled in their profession, and fitted for the practise of it, they shall receive the approbation of the society in letters testimonial of such examination, under the seal of the said society, signed by the president, or such other person or persons as shall be appointed for that purpose.

And be it further enacted by the authority aforesaid, That if the said president, and such other person or persons, so elected and appointed for the purpose of examining candidates as aforesaid, shall obstinately refuse to examine any candidate so offering himself for examination as aforesaid, each and every such person so elected and appointed as aforesaid, shall be subject to a fine of *one hundred pounds*, to be recovered by the said candidate, and to his own use, in any court within this commonwealth proper to try the same.

And be it further enacted by the authority aforesaid, That the fellows of said society may, and shall forever be deemed capable in law, of having, holding and taking in fee simple or any less estate by gift, grant or devise or otherwise, any land, tenement or other estate, real or personal; provided that the annual income of the whole real estate that may be given, granted or devised to, or pur-

chased by the said society, shall not exceed the sum of *two hundred pounds*, and the annual income or interest of said personal estate, shall not exceed the sum of *six hundred pounds*; all the sums mentioned in this act to be valued in silver at *six shillings and eight pence* per ounce: and the annual income or interest of the said real and personal estate, together with the fines and penalties paid to said society, or recovered by them, shall be appropriated to such purposes as are consistent with the end and design of the institution of said society, and as the fellows thereof shall determine.

And be it further enacted, That the first meeting of the said Medical Society shall be held in some convenient place in the town of *Boston*; and that *Edward Augustus Holyoke*, Esq; be, and he hereby is authorised and directed to fix the time for holding the said meeting, and to notify the same to the fellows of said Medical Society.

In the House of REPRESENTATIVES, October 30, 1781.

This bill having had three several readings, passed to be enacted.

NATHANIEL GORHAM, Speaker.

In SENATE, November 1, 1781.

This bill having had two several readings, passed to be enacted.

SAMUEL ADAMS, President.

Approved, JOHN HANCOCK.

A true copy.

Attest, JOHN AVERY, jun. Secretary.

In accordance with the last clause of this Act, Dr. Holyoke published a notice in "The Boston Gazette and The Country Journal," November 12, 1781, calling a meeting of the members whose names are mentioned in the charter. It was called "at the County Court-House, in Boston, on Wednesday the 28th Day of this Instant November, at Ten o'Clock, A. M. for the Purpose of chusing Officers of the Society, and transacting any other Matter (which by this Act they are empowered to

do) as they shall think proper." The charter members were thirty-one in number and represented different sections of the State: fourteen of them lived in Boston; two in Newburyport; two in Salem; and one in each of the following towns:—Cambridge, Danvers, Dedham, Dighton, Great Barrington, Groton, Hadley, Northampton, Portland, Rutland, Scituate, Springfield, and Weymouth. By counties, as constituted at that time, Suffolk had sixteen members; Essex had five; Hampshire, three; Middlesex, two; Berkshire, Bristol, Plymouth, Worcester, and Cumberland, in the District of Maine, one each.¹

The first meeting of the corporation was duly held in the County court-house, on November 28, 1781, at which time there were present nineteen of the thirty-one persons whose names are given in the Act of Incorporation. The court-house of that period stood on the site of the present one in Court Street. The first vote passed was that the officers at this meeting should be chosen *pro tempore*; and subsequently "Edward Augustus Holyoke Esq:" was elected president, "Doct^r Isaac Rand jun" secretary, and "Doct^r Thomas Welsh," treas-

¹ A curious incident happened in connection with the formation of the Medical Society. The name of John Sprague appears among those mentioned in the Act of Incorporation; and accordingly Dr. John Sprague, of Dedham, was present at the early meetings and took part in the proceedings. This continued until July 18, 1782, when Dr. John Sprague, of Newburyport, was chosen a member. At the meeting of the Councillors, held October 4, 1782, a reply to the notification of his election was read, wherein he stated that he was the senior physician of the name in the State, and that he considered himself already a member by the charter. Dr. Sprague, of Dedham, who was present at the time, quietly resigned his supposed membership; but he was chosen again a member at the same meeting.

urer. The records follow the precedent of the Act in withholding the medical title from Dr. Holyoke's name. Perhaps it was because Dr. Holyoke held a commission as Justice of the Peace; and the title of Esquire at that time carried a great deal of dignity with it.

The second meeting was held in the court-house, on April 17, 1782, and Dr. Samuel Holten chosen president *pro tempore*. A committee, consisting of Drs. Tufts, Warren, and Appleton, was appointed to consider the form of letters testimonial to be given to those candidates who were approved by the censors of the Society; and to invent a device and motto for a seal. This was an important committee, and they appear to have reported at the next meeting,—though I do not find any record of the details,—when they asked for further time in regard to the seal. One of the prime objects of the Society was to draw a line between the intelligent and the ignorant practitioners of medicine; and it was the function of this committee to devise some method to reach that end. Even the matter of the seal was considered sufficiently important to be mentioned in a separate clause of the original Act.

The third meeting was held on June 5, 1782, and Dr. James Lloyd chosen president "*pro hac vice*." At this meeting permanent officers were elected for the ensuing year; and as the pioneers of a long line of eminent physicians who have held office in this distinguished organization, I give the names of all, as taken from the records:—

Edward Augustus Holyoke Esq.	President
Doct ^r James Pecker	Vice President
Doct ^r Samuel Danforth	
Doct ^r Joseph Gardner	
Hon: Sam ^l Holten Esq.	
James Lloyd Esq.	
Doct ^r Isaac Rand jun.	
Doct ^r John Sprague	
Hon: Cotton Tufts Esq	
Doct ^r John-Barnard Swett	Corresponding Secr ^y
Doct ^r Nath.-Walker Appleton	Recording Secr ^y
Doct ^r Thomas Welsh	Treasurer
Doct ^r Aaron Dexter	Vice Treasurer & Librarian
Doct ^r Sam ^l Danforth	
Doct ^r Charles Jarvis	
Doct ^r Joseph Orne	
Hon: Cotton Tufts Esq.	
Doct ^r John Warren	

Councillors

Censors

At this meeting it was voted

"That a Committee be appointed to publish a List of the Officers this day elected, to announce to the Public that the Massachusetts Medical Society is organized, also to invite the Correspondence of the Faculty and others as they shall think proper."

By the Act of Incorporation, Dr. Holyoke was empowered to name the time and place for holding the first meeting of the Society; and it was a fitting supplement to the previous arrangements that he should be chosen its first president. He is so well known by reputation, that it seems needless to give many details about him. Born in Salem, August 1, 1728, he graduated at Harvard College in the class of 1746, and began the study of medicine under the guidance of Dr. Thomas Berry, of Ipswich. After its completion he entered upon the practice in his native town, where he met with great success. At the time of his election, he had just passed what is called the middle age of life, and

was engaged in a large and increasing business. Eminent as a surgeon, he was widely known not only in this province, but in Maine and New Hampshire, and was occupying a social and professional position that rarely falls to the lot of any man.

Dr. Holyoke continued to practise medicine in Salem for seventy-nine years; and it was said of him that there was not a dwelling-house in the town at which he had not visited professionally. During a long life he enjoyed almost uninterrupted health, which may be ascribed in part to his cheerful disposition and his continued exercise out-of-doors. He died March 31, 1829, having reached the advanced age of more than one hundred years. On the centennial anniversary of his birth, about fifty physicians of Boston and Salem gave him a public dinner, at which he appeared in remarkable spirits and vigor. He smoked his pipe at the table, and gave an appropriate toast to the Medical Society and its members.

It sometimes happens that a great discovery is nearly made, but the final step is not taken to accomplish it. Often there is a faint glimmer of a new truth, but yet not clear enough for distinct assertion. Such was the experience of Dr. Holyoke who almost anticipated the great discovery of Laennec. The following report of a case made by him was printed in the year 1793, though it was written probably long before that time:—

“A man about fifty-three or fifty-four years old, of a thin habit of body, labouring under a very bad cough, attended with a hectic fever, profuse sweats, &c. had a large tumour formed upon the upper part of the thorax on the left side, extending from the

shoulder all along the lower edge of the clavicle, to the *sternum*, about the breadth of a man's hand. This tumour had all the appearance of a large abscess; it was accordingly treated as such, and suppuration seemed to be coming on as usual; but on removing the dressings one day, I found the tumour (though the skin remained whole) less prominent to the eye, flabby to the touch, and the pain and inflammation abated. I was now at a loss what to make of the case, as the abscess seemed too far advanced to expect discussion. While I was thinking of the matter, the patient asked me 'what could occasion that blubbering noise (as he expressed himself) in the sore.' Upon which, applying my ear near the part where he perceived the noise, I plainly heard a whizzing, and as he termed it, a blubbering noise at every breath, exactly resembling such as arises from the rushing of air through a small orifice. This orifice appeared to be just under the left *clavicle*, but nearer to the shoulder than the *sternum*. Upon viewing the part attentively, a small dilation and contraction was perceptible upon expiration and inspiration; and the part was evidently puffy and flatulent to the touch. At this time the cough was urgent, and the expectoration very copious.

From this time, the tumour, inflammation, and hardness, subsided; the noise in breathing gradually lessened, till it ceased; and by the assistance of pectoral medicines, the bark, &c. the hectic and cough after a while left him; and with them the sweats, &c. his appetite returned, and he recovered his strength, though slowly; and is at this time in tolerable health." —("Memoirs of the American Academy of Arts and Sciences," vol. ii. part i. 189, 190.)

It was Dr. Holyoke's opinion that the abscess formed originally in the thoracic parietes, and afterward penetrated to the lung, which had become adherent to the walls of the chest at this part,—discharging itself through the bronchial tubes. The abscess having a communication with a cavity in the lung, the air would pass to and fro, during the act of breathing; "and this passing and re-passing of the air," continues Dr. Holyoke, "will fully account for the noise which the patient complained of."

From the accompanying symptoms, such as emaciation, cough, and hectic fever, it seems prob-

able that this case was one of empyema, arising from pleuritic inflammation, in which the matter pointed outwardly, but before breaking through the skin burst into the lung, and was thereby discharged. The pathology of thoracic disease was not then understood as well as now; and it is not surprising that Dr. Holyoke should have thought that the abscess formed externally to the chest, and afterwards made its way into the lung. The report of this case contains more than a hint of the great fact which has rendered the name of a French physician illustrious in the annals of medicine.

The fourth meeting of the Society was held on July 18, 1783, when "The Com: appointed to agree upon a Device and Motto for a Seal, laid several Devices before the Society, particularly a Figure of $\text{\textae}sculapius$ in his proper habit pointing to a wounded Hart nipping the Herb proper for his Cure with this motto, 'vivere natura.'" The design was adopted, though the motto was changed to *naturâ duce*; and the same committee was authorized to procure a seal made after this device.

The fifth meeting was held on September 4, when it was voted, "That the Fellows of this Society be requested to transmit to the Recording Secretary an Account of those Diseases that have from one stated Meeting to another been most prevalent in the Circle of their practise, that the same may be laid before the Council for their Inspection and such communicated to the Society as the Council shall direct." Many such papers were then sent

in, which are now carefully preserved on the Society's files.

The sixth meeting was held on October 16, but no quorum was present.

The seventh meeting was held on April 9, 1783, when the committee on the Seal reported that they had procured one, which was laid before the Society and unanimously accepted. It was also voted that candidates for practice, who had passed a satisfactory examination by the Censors, should pay the sum of eight Spanish milled dollars. A circular letter was adopted to be sent to those members mentioned in the Act of Incorporation, who had not been present at any of the meetings. By the records it appears that there were eight such persons. The letter is as follows:—

Sir, The Fellows of the Mass: Medical Society, who have met from time to time for the purposes of their Appointment, have conceived themselves happy in your having been appointed one of its Fellows, and beg Leave to assure you, that your Communications will at all times be highly acceptable; and that they are sincerely desirous of your Assistance in carrying on the Business of the Society, which in its Beginning calls for more particular Exertions, and requires the joint Efforts of all its members.

The Society has been so unfortunate as not in any way to be informed of the Determination of several Gentlemen, appointed by an Act of the General Court Fellows thereof, relative to their Acceptance of the Trust, for want of which information, the Society in the prosecution of its Business, has found itself embarrass'd and unable to make such Arrangements as might more fully tend to promote the Ends and Designs of the Institution, for which Reason we have address'd you on this Subject; not doubting of your benevolent Intentions & Readiness to promote an Undertaking, conducive as we hope to the Benefit of Mankind in general and the Medical Faculty in particular. We presume that your answer of acceptance will be forwarded by the first opp^o.

With sentiments of Respect & Esteem,
We are &c

At the same meeting a Resolve was read, passed by the General Court March 20, on the petition of Cotton Tufts, granting the use of a room in the Manufactory House to the Massachusetts Medical Society, in connection with the American Academy of Arts and Sciences. The Manufactory House was a noted public building of that time, belonging to the State, and situated in Tremont Street, nearly opposite to the site of the Park Street Meeting-house. The room was fitted up conjointly by the two associations, and first used by the Medical Society on October 15, 1783. It was occupied by them for the stated meetings held on October 30, and April 14, 1784, and probably for other minor purposes. The meeting on June 2, as well as the one on July 21, took place in the County court-house, where all the former ones had been held, before the room in the Manufactory House was occupied. The meeting of April 13, 1785, was held in "the Stockholders' room in the Bank." The Massachusetts Bank, then the only bank in the State, was organized in the year 1784, at which time it bought the Manufactory House, sold by order of the General Court. The stockholders' room in this building was the apartment previously used by the Society. The meeting of May 4, 1785, took place in the Senate Chamber of the Old State House, and the one of October 19, 1785, was held in "Mr. Furnass's painting room in Court St.;" while that of October 18, 1786, was "in the hired room in Court Street,"—which may have been the same as Mr. Furnass's room. The meet-

ings of October 20, 1790, and April 13, 1791, were held in Concert Hall, a noted tavern at the southerly corner of Court and Hanover streets. I have been particular in giving some of the minor details of the Society's early history, in order to show its small beginnings and the changing places of its meetings. It is well sometimes to compare present opportunities with the narrow means of past generations.

The birth of the present Medical School in the year 1783 formed an epoch in the medical history of the State, though the Massachusetts Medical Society, as a corporate body, did not officiate on the occasion. At first the School was looked upon by the fellows with some jealousy, as they feared that the existence of two institutions would lead to serious embarrassments. The matter was considered of sufficient importance to be referred to a special committee of the Society, which, however, did not report for nearly three years. At the meeting held on October 15, 1783, it is recorded that—

“ Upon a Recomēdation of Council, to consider Whither the Doings of any of the literary Societies in this Comōnwealth, interfere with the Charter Rights of the Medical Society;

“ *Voted*, That a Comō: of three be appointed to take into Consideration the above Recomēdation, and to confer with any such Societies (upon the Subject, as they may think proper) and report:

“ *Voted* That Dr. Cotton Tufts, Dr. Kneeland & Dr. Appleton be this Committee.

Nothing further relating to this subject appears to have been done, until the meeting on June 7, 1786, when—

“ The Com: appointed on 15 Oct: 1783 to consider whither the Doings of any of the literary Societies in this Commonwealth interfere with the Charter Rights of this Society, & to confer with any such Societies upon the Subject as they might think proper, reported, That they had attended the business of their appointment and upon examining the Medical Institutions of Harvard College, the Com: were of Opinion that those Institutions did interfere with the Charter-Right of this Society ‘to examine Candidates for the practise of Physic & Surgery & to grant Letters testimonial of the Examination of such as shall be found skilled in their profession’ in that, those Institutions provided for the Medical professors of that College examining their Pupils & granting Letters testimonial or public Certificates, to such of them as they judged proper, of their Abilities to practise Physic. Whereupon the Com: applied to the Government of the College for a Conference upon the Subject, which was had, & ended in an agreement that the Com: should confer with the Medical professors of the College & make such arrangements respecting this matter as should be mutually agreed upon for the Honor of both Societies & the advancement of Medical Knowledge. This Conference between those Medical professors & the Com: for some reasons, unknown to the Com: was never held. The Com: further report that it has lately been suggested to them that the Medical Institutions of Harv: College have been altered, whereupon Enquiry was made respecting the Matter and an Acc^o of the above Institutions authenticated by the Secr^y of the Overseers, was procured, and upon a careful examination the Com: were clearly & unanimously of Opinion that Harvard College Medical Institutions do not, and that no Doings of that or of any other literary Society do, as far as the Com: could find, interfere with the Charter Rights of this Society.”

At this time there were but three professors in the Medical School; and two of these were original members of the Medical Society. It was, therefore, extremely improbable that there would be any permanent friction between the two bodies. The Medical Society had no right to confer degrees; and it does not appear that the Medical School had any intention of granting testimonial letters to the profession at large. What then bid fair to be a little tempest soon subsided.

The American Revolution had opened a new field for medical investigations, and the establishment of military hospitals furnished increased facilities for the study of practical anatomy. The opportunities for dissection were frequent, and the young and enthusiastic students of medicine were not slow to avail themselves of these advantages. Dr. John Warren had been appointed superintending surgeon of the military hospital in Boston; and his zeal for anatomical and surgical studies soon prompted him to utilize some of the bodies of soldiers who had died, without friends to claim for them the last rites of burial. To this end, in the winter of 1780, he began a course of demonstrations at the hospital, situated at the west end of the town, near the site of the Massachusetts General Hospital; and this course of lectures was the forerunner of those now given at the Harvard Medical School. These demonstrations were carried on with great secrecy, and attended only by a few physicians and medical students. During the next winter another course was given, which was more public; and these two courses laid the foundation of the present Harvard School. Dr. Warren was encouraged in the undertaking by the help he received from the Boston Medical Society, an association organized about that time to pursue anatomical studies. The School began operations in the year 1783; and Dr. Warren was chosen, most naturally, to fill the professorship of anatomy and surgery. At first the lectures were delivered at Cambridge, and were attended not only by the

medical students, but by the senior class of the college. Subsequently the whole course of instruction was given in Boston, where there were better opportunities for clinical practice and surgical operations. This change took place in the autumn of 1810, though it had in part been brought about during the preceding year. The removal was followed immediately by a large increase in the number of students.

Dr. Warren held the position from his election November 22, 1782, until his death, which took place April 4, 1815. He was succeeded by his son, Dr. John Collins Warren, who held the place until the year 1847, when he was followed by Dr. Oliver Wendell Holmes. It is not a little remarkable that during a period of nearly a century this chair has had but three occupants; and I doubt whether a similar term of service by three successive professors can be found in any other college of the country. Dr. John Warren, who was the younger brother of Dr. Joseph Warren, the Revolutionary General, is the ancestor of a long line of eminent physicians. He was followed in the profession by his son, Dr. John Collins Warren, the father of the late Dr. Jonathan Mason Warren, a distinguished surgeon, whose memory I revere as that of a faithful preceptor. It is with feelings akin to pride that I mention him on this occasion as my instructor when a medical student, as his father before him had been of my father. The representative of the Warren family, in the fourth generation, can stand on his own merits without

any help from the name; and to-morrow he will speak for himself before this Society, as the orator of the day.

In the early period of its history, the School was not known by its present name, but was called the Medical Institution of Harvard College; though somewhat later it is spoken of as the Medical School of Harvard College or of Harvard University. Occasionally it is mentioned in the newspapers as the Boston Medical School; and after its removal from Cambridge, it is sometimes called the Massachusetts Medical College, the name given to the building erected in Mason Street, for the use of the School. An engraving of this structure may be found in "The New England Journal of Medicine and Surgery," for April, 1816. It is only in recent times, perhaps within twenty-five years, that the institution has been called the Harvard Medical School. This name has grown up gradually, and now we seldom or never hear any other given to it.

The Berkshire Medical Institution may be noticed in this place. It was established at Pittsfield, in the year 1822, in connection with Williams College, though fifteen years later it became independent of it. It filled an important position in the medical history of the State, and was always in close affiliation with this Society. At one time it had a large number of students; but owing to a diversity of causes its prosperity was checked, and it was given up as a medical school in the year 1868. By an Act of the Legislature,

passed May 22, 1869, the corporation was dissolved.

At the meeting held October 26, 1785, corresponding and advising committees were appointed for the different counties of the State, in order to encourage reports of professional cases to this Society; and many years later, on April 28, 1803, it was voted—

“That the Commonwealth be divided into 4 Districts, the Middle, Southern, Eastern, & Western; the Middle to consist of Suffolk, Norfolk, Essex, & Middlesex; the Southern of Plymouth, Bristol, Barnstable, Dukes County, and Nantucket; the Eastern district [to consist] of Maine; the Western [of] Hampshire, Berkshire, and Worcester.”

Immediately afterward committees were appointed for each of these districts, “to ascertain who are deserving of becoming Fellows.” These organizations have since grown and become the present District Societies. At the beginning of this century, Hampshire County included the present ones of Franklin and Hampden.

At the meeting held on November 8, 1786, the Council of the Society was requested to consider the propriety of addressing the Legislature that some measures might be taken to prevent the sale of bad and adulterated medicines, and to report thereon.

In the spring of 1790, the first number of a publication entitled “Medical Papers” was prepared under the direction of the Society, and five hundred copies printed; but, for the want of funds, the second number did not appear until the year 1806. The third number was printed in 1808,

which completed the first volume of the series now known as the "Medical Communications of the Massachusetts Medical Society." It is made up almost entirely of papers written by the members, giving the result of their observations on diseases and epidemics in their respective neighborhoods. The address of Dr. Isaac Rand, delivered June 6, 1804, is usually bound in this volume. Its subject is "Observations on Phthisis Pulmonalis"; and it is the first one of the long series of annual addresses made before the Society. This pamphlet became so rare that, by a vote of the Councillors, it was reprinted in the year 1853. It was published in exact *fac-simile*, under the careful supervision of the late Dr. Nathaniel Bradstreet Shurtleff. The "Medical Communications" have been continued until now, when they comprise a work of twelve volumes. One number of the "Communications" appears each year, and five or six of them make up a volume; the later numbers consisting of the annual addresses, proceedings of the meetings, and other papers.

A *Pharmacopœia*, prepared by Drs. James Jackson and John Collins Warren, was published in the year 1808, under the auspices of the Society. It was formed on the plan of the *Pharmacopœia* of the Edinburgh College, and was designed to introduce modern nomenclature, and to establish greater uniformity in the prescriptions of physicians. "The American New Dispensatory," written by Dr. James Thacher, and published in the year 1810, was submitted to a committee of this

Society, and received its official sanction. The basis of this work was the *Pharmacopœia* which has just been mentioned. The "Library of Practical Medicine"—a series of twenty-five volumes, mainly reprints of English works—was also published for the use of the fellows. It began in the year 1831, and was continued until 1868.

"The Publications of the Massachusetts Medical Society," technically so called, were begun in the year 1860, and kept up until 1871. They consist of three volumes, comprising, for the most part, essays and reports read at the meetings, and subsequently published. Papers of this character are now printed in the "Communications," and do not appear in any separate serial.

It may not be inappropriate to mention in this place "The New England Journal of Medicine and Surgery," which was published quarterly in Boston. While it was not an official organ, it was "conducted by a number of physicians," in the warmest interest of this Society. It was edited with much ability, and contained many original papers. It began in the year 1812, and was kept up until 1828, when it was followed by "The Boston Medical and Surgical Journal," a publication which has continued till the present time.

The protective power of vaccination was discovered in England by Edward Jenner, near the end of the last century; and the news of its discovery was soon brought to this country. Among the first persons here, and perhaps the first whose critical attention was called to its im-

portance, was Dr. Benjamin Waterhouse, of Cambridge, an early fellow of this Society. Its introduction, like that of variolous inoculation, was destined to meet with many difficulties and obstacles; and Dr. Waterhouse was to be the champion. He wrote much as an advocate of the cause; and in spite of popular ridicule and prejudice he succeeded in carrying the day. A communication, signed with his initials and dated at Cambridge, March 12, is found in the "Columbian Centinel" of March 16, 1799. It is headed "*Something curious in the MEDICAL LINE,*" and is the first account of vaccination that was given to the public in this country. In the article Dr. Waterhouse describes cow-pox, and says that it must not be confounded with another disorder, incident to the human race, which bears a somewhat similar name. He printed the account in a newspaper in order to excite "the attention of our dairy farmers to such a distemper among their cows," and to inform the profession generally of this security against small-pox.

In the year 1800 he published a tract entitled "A Prospect of exterminating the Small-pox; being the history of the Variola Vaccina or Kine-pox," &c.; and in it he describes the method he used, July 8, 1800, in vaccinating his son, Daniel Oliver Waterhouse, a lad five years of age, who had this disease in a mild way. From the arm of this boy he vaccinated another son, three years old, who had the customary symptoms in a light form; and subsequently he "inoculated a servant boy of about 12 years of age, with some of the

infected thread from England." This expression furnishes the clew to the method adopted for obtaining the vaccine virus, which came "by a short passage from Bristol," England; though in the autumn of 1802, Dr. Waterhouse speaks of receiving quill-points, or "tooth-picks," charged with virus. Before he had finished the practice in his own family, he had vaccinated four of his children and three of his servants, with no serious symptoms or consequences. The faith he had in the efficacy of the operation, prompting him to try it on one of his own children, was of that living kind which always commands attention. In this matter we are reminded of Dr. Boylston's bold act in inoculating his son for small-pox.

In the year 1802 Dr. Waterhouse published a work of one hundred and thirty-four pages, which formed Part II. of the previously mentioned tract; and in it he gives a full account of the new inoculation in America. In all his efforts to introduce vaccination, Dr. Waterhouse was warmly seconded by Dr. William Aspinwall, of Brookline, who deserves no small meed of praise in this matter. Dr. Aspinwall had paid much attention to variolous inoculation; and after the death of Dr. Boylston, the first American inoculator in point of time, he erected small-pox hospitals in Brookline, where he treated a large number of patients for the disease, which had been artificially induced. No man in America, probably, ever inoculated so many persons, or enjoyed so wide a reputation for his skill in so doing, as Dr. Aspinwall.

Massachusetts was the first colony to introduce small-pox inoculation, and she was also the first State to adopt kine-pox vaccination; and her towns have always taken the lead in sanitary matters. During the summer and autumn of 1802 some interesting experiments were conducted under the direction of the Boston Board of Health, whose unremitting exertions at that time, to prevent contagious disease, entitle them to the highest praise. The Board fitted up a hospital on Noddle's Island, now known as East Boston, and invited a number of physicians to co-operate with them in an undertaking to diffuse knowledge and dispel prejudice in regard to vaccination. Some bold experiments were tried at this hospital, which fortunately were highly successful. On August 16, 1802, nineteen boys were vaccinated, and all passed through the regular stages of the cow-pox; and on November 9, twelve of these children, together with a son of Dr. Bartlett, who had previously had the cow-pox, were inoculated for the small-pox, with matter taken from a patient in the most infectious state of the disease, and no trouble whatever followed. In order to show the true variolous character of the virus used in this experiment, two lads were inoculated at the same time with the same matter; and in due time a severe eruptive fever followed, with a plenteous crop of variolous pustules. When these two cases were in the right stage, matter was taken from them and inserted, for a second time, in the arms

of the twelve children who had been previously inoculated, and besides in the arms of the other seven boys who were absent at the first inoculation. They had, moreover, been exposed to infection, most of them for twenty days, by being in the same room with the two lads who had the small-pox; and all nineteen escaped. These and other facts are given in a report which was made and signed by eleven physicians,—James Lloyd and Benjamin Waterhouse appearing at the head of the list. A full and official account of the whole affair is found in the “Columbian Centinel,” December 18, 1802.

The town of Milton was the first to act in its corporate capacity, and extend the benefits of vaccination to its citizens. In the year 1809, three hundred and thirty-seven persons of various ages and conditions among its inhabitants were vaccinated; twelve of them were afterward tested by inoculation for small-pox, and found fully protected. The test was conducted by Dr. Amos Holbrook, a fellow of this Society; and the twelve persons—eight boys and four girls—were volunteers for the operation. The town acted during the whole affair in a most liberal and intelligent spirit, and published a valuable pamphlet, setting forth all the transactions concerning it. It was entitled “A Collection of Papers relative to the Transactions of the Town of Milton, in the State of Massachusetts, to promote a General Inoculation of the Cow Pox, or Kine Pox, as a never failing preventive against Small Pox Infection;” and a

copy was sent to the selectmen of each town in the Commonwealth.

About this time a similar plan of public vaccination was adopted at New Bedford. By an Act of the General Court, passed March 6, 1810, the towns throughout the State were directed to appoint committees to superintend the matter, and authorized to defray the expenses of a general system of vaccination. The motive power of all these proceedings was furnished by the Massachusetts Medical Society, though it was not always apparent.

By the Act of Incorporation the membership of the Society was limited to seventy persons; but on March 8, 1803, an additional Act was passed by the General Court, which removed all limitation, and made many changes in other respects. Since then the number of fellows has been steadily increasing; and at the present time every town in the State, with the exception of a few small ones, is represented among the members.

In the winter of 1811, an effort was made to obtain from the General Court a charter for another medical society, to be called the Massachusetts College of Physicians. The movement was strenuously opposed, as might have been expected, by the Massachusetts Medical Society; and a long controversy was the result. There had not been so much personal and professional feeling excited among the physicians of the State, since the introduction of small-pox inoculation, ninety years before this time.

The following petition to the Legislature was received by that body on February 12, 1811, and referred by them six days afterward to the next General Court:—

To the Honourable the Senate, and the Honourable the House of Representatives, in General Court assembled, this petition most respectfully sheweth:—

That seeing health is a blessing, which sweetens all our enjoyments; and long life that which all men naturally desire, so every thing that tendeth to secure the one or leadeth to the other, is an object worthy the attention of this Legislature.

And considering, moreover, that of the various methods of obtaining and diffusing medical knowledge, not one is found so effectual and desirable as a friendly and liberal intercourse and honourable associations of its professors; more especially when their end and aim is mutual improvement and the publick good; and experience has proved that two literary and scientific societies produce more than double the advantage of one—

Influenced by these sentiments, we your petitioners humbly pray the Honourable the Legislature to constitute us, and such as may hereafter associate with us, a body politic and corporate, by the name and title of the Massachusetts College of Physicians; with such powers, privileges and immunities, as other medical associations of the like nature and views enjoy, under the same denomination, in several states of the union.

And your petitioners shall, as in duty bound, ever pray.

THOMAS WILLIAMS.	JAMES MANN.
SAMUEL DANFORTH.	CHARLES WINSHIP.
MARSHALL SPRING.	ABIJAH DRAPER.
NATH. AMES.	JAMES LOVELL.
WILLIAM ASPINWALL.	JACOB GATES.
JOHN JEFFRIES.	WILLIAM INGALLS.

At the annual meeting of the Medical Society, held June 5, 1811, a committee, which had been appointed "to prepare a memorial to the General Court respecting a petition for the incorporation of a college of physicians," presented the following remonstrance. It was adopted almost unanimously, one member only out of seventy-two dissenting.

To the Honourable the Senate and the House of Representatives of the Commonwealth of Massachusetts.

THE Massachusetts Medical Society, in consequence of an application to the General Court in February last, for the incorporation of a College of Physicians, beg leave respectfully to represent,

That the said Massachusetts Medical Society was established in November, 1781, with power to elect officers, examine and licence candidates for practice, hold estate, and perpetuate its existence as a body corporate. In June, 1782, the society was organized agreeably to the provisions of the statute, and the members directed in every way to extend and increase its usefulness. By an additional act of the General Court in February, 1789, authority was given to point out and describe such a mode of medical instruction as might be deemed requisite for candidates previous to examination; which important duty has been constantly attended to, and occasionally revised. By a farther additional act in March, 1803, as the society was thought too limited to answer the purposes of its establishment, its state was so essentially changed, that the number of its fellows originally limited to seventy, may embrace all respectable physicians and surgeons resident in the state; and that district societies may be established in such places as will facilitate medical improvement, and prevent the inconvenience of applying in all cases to the censors in Boston for an examination.

In consequence of this provision, several district societies are formed, and are in a prosperous condition, cultivating medical science, and qualifying candidates, in various parts of the commonwealth. It has been the constant endeavour of the society, without reference to local or political considerations, to admit the most respectable practitioners in every section of the state, and they are desirous to elect all others of known talents who, by accident or from any other cause, are not admitted.

The number of candidates licensed for practice by the society is more than eighty, all of whom, as well as all bachelors of medicine in Harvard University, may claim admission as fellows of the society, after three years practice.

The present number of fellows exceeds two hundred. Publications of important cases communicated to the society; of a Pharmacopœia, which is now in general use; and of Dissertations read at the meetings, have been made, as often as the funds would possibly admit; committees have been appointed to investigate the nature, causes and cure of epidemics, and the result of their inquiries communicated to the publick. The greatest harmony has distinguished their proceedings. No mention was ever made, as has been insinuated, of regulating fees in practice. The sole object of the society has been to promote the design of its institution, and the fellows have been led to believe by the constant patronage and

support of the Legislature, as well as the publick voice, that their conduct has been approved.

It is scarcely necessary to remark, that, from the state of medical science, at the incorporation of the society, its progress, for several years, was slow, and that it was less useful than could have been wished; but by the aid and co-operation of the flourishing medical school at the University, it is at this time in a most prosperous state; and it is the united endeavour of all to promote medical instruction, and discourage unworthy practices.

It is found on examination that the petition on the files of the General Court, for a College of Physicians, is for similar powers and privileges with this society, on the ground, that "two literary and scientific societies, would produce more than double the advantages of one."—The society presume not to dictate to the Legislature on this important subject; but they beg leave respectfully to offer an opinion, that the establishment of such an institution can effect no object, not accomplished by existing societies, and would be so far from promoting a laudable and useful emulation, that candidates rejected by one society would resort to the other, with the greatest hopes of success, whatever might be their qualifications for the proper exercise of their profession. Hence would arise disagreements and animosities, which in other parts of the United States (particularly in Philadelphia at a former period, and very recently at New-York) have been injurious to the profession and to the publick. Such animosities were threatened in the infancy of this establishment, by a supposed interference of Harvard College, with the rights of the Society, and would have produced the most unhappy effects, but for the repeal of an exceptionable article in that establishment, and the accommodating conduct of those who at that period were the guardians of science, and the patrons of the healing art.

From these considerations, and from other circumstances which the Medical Society are prepared to state, they have thought it an incumbent duty to request that the prayer of the said petition should not be granted, and they as in duty bound will ever pray.

In behalf of the Society,

JOHN WARREN, President.

BOSTON, June 5, 1811.

On June 14, 1811, both the petition and remonstrance were presented at the same time to the Legislature, and they were referred to a joint committee of the Senate and House. After certain formalities final action in regard to them was

deferred until the second session of the General Court, which was to meet on January 8, 1812. During this interval communications appeared in the newspapers, and pamphlets were printed, setting forth the views of the writers on each side of the question. At one time it seemed as if the petitioners would be successful in their efforts, but finally they were defeated.

The speech of Governor Gerry, at the opening of the session, contained the following remarks:—

“ Many Institutions in this Commonwealth which have promised great benefit to the public, would have met with much more success, had similar Corporations been established. When only one of any kind is permitted, it too frequently happens, that a majority of individuals composing it, indulge their private views and interests, to the exclusion of men, of the most enlarged, liberal, and informed minds; and thus destroy the reputation and usefulness of the society itself. The multiplication of such institutions, has a tendency, not only to prevent this *evil*, which is an *opiate to genius*, but to produce a competition, and to promote in the highest degree the utility of such establishments.” — (“ Columbian Sentinel,” January 15, 1812.)

An attempt had been made, before the Legislature met, to mingle polities with the question and render it a party one. It will be seen, by the extract given above, that the Governor threw his influence on the side of the petitioners.

In the early part of February, 1812, the committee of the Legislature gave a hearing in regard to the matter, in the Senate Chamber, which was filled at the time with spectators. Drs. James Mann, William Ingalls, Abijah Draper and Joseph Lovell appeared in order to support the petition; and Drs. David Townsend, John Warren, Thomas Welsh, Aaron Dexter, Josiah Bartlett, William

Spooner, and Benjamin Shurtleff, as a committee of the Medical Society, to defend the remonstrance. The petition was advocated also by Dr. Benjamin Waterhouse, Professor of Theory and Practice of Physic,—he and Drs. Leonard Jarvis, Edward Whitaker, Daniel Thurber, and Nathaniel S. Prentiss, having added their names to the document. This brought out a reply from Dr. James Jackson, who was, shortly afterward, Dr. Waterhouse's successor, in behalf of the medical institution at Cambridge, as it was generally understood that a new school would be connected with the proposed establishment.

On the next day the committee reported, by a bare majority, so far in favor of the petitioners that they should have leave to bring in a bill, which report was accepted by the Senate. The proceedings of the House in regard to it, on February 13, 1812, are found in the "Columbian Centinel," February 15, and are as follows:—

"The report of a joint Committee which had given leave for the introduction of a bill to incorporate a *College of Physicians*, and which report had been accepted in the Senate, was taken up in the House yesterday, when the House non concurred the vote of the Senate; and refused leave to bring in a bill.

"This day, Mr. CANNON, moved to reconsider the vote of yesterday. This motion, which involved all the merits of the question, was advocated by the mover, Messrs. MARTIN of *Marblehead*, AUSTIN of *Charlestown*, GREEN of *Berwick*, and others; and opposed by Messrs. CHILDS, of *Pittsfield*, Mr. KITTRIDGE, Messrs. FOSTER, FAY, RUSSELL, DAVIS, and others, and was negatived. For it, 195. Against, 211. The debate on this subject was animated and interesting, and lasted three hours. The gentlemen of the Committee which reported the leave stated, that in the examinations before them, they found nothing to support nor justify the numerous insinuations and reports which had been circulated in print and in out-door conversation, tending to implicate and injure

the existing *Medical Society*; but that the Society has stood, and now stands, on high ground for usefulness, impartiality and respectability. It was clearly demonstrated—though attempts were made out doors to make it a party question—that the institution asked for, is unnecessary, and that if granted would produce great dissensions among the faculty, and be highly injurious to the community."

Thus happily ended one of those unpleasant controversies which never lead to good results. The petition for the Massachusetts College of Physicians, as well as the remonstrance against it, are found in Dr. Bartlett's address delivered at the annual meeting of this Society, June 6, 1810, which was published "with alterations and additions to January 1, 1813," in the first volume, second series, of the Massachusetts Historical Collections. This edition of the address contains ten pages of matter more than the one printed in the second volume of the *Medical Communications*.

At the beginning of the present century, Massachusetts had no hospital for the treatment of general disease, though there were such institutions in the States of New York and Pennsylvania. During many years before this time, there were various indications in the community that the want of such an establishment was beginning to be felt; and in the summer of 1810, strenuous efforts were made to supply the want, which proved successful. The prime movers of the undertaking were so closely identified with this Society that, in any narration of its history, the Massachusetts General Hospital ought to be mentioned. A circular letter, dated August 20, 1810, was prepared by Dr. James Jackson and Dr. John Collins Warren, and

addressed to some of the most influential citizens of Boston and its neighborhood, for the purpose of awakening in their minds an interest in the subject. It was the opinion of Mr. Bowditch, as recorded in his "History of the Massachusetts General Hospital," that this circular-letter might be regarded as the corner-stone of the institution. The two writers of it were subsequently presidents of this society.

Dr. James Jackson, the first signer, is perhaps the most conspicuous character in the medical annals of Massachusetts. I doubt whether any physician in the State ever exerted so large and lasting an influence over his professional brethren or his patients. Born in Newburyport, October 3, 1777; graduated at Harvard College in the class of 1796; he studied his profession under the venerable Dr. Holyoke, of Salem. In the year 1812 he was appointed to the Hersey professorship of the Theory and Practice of Medicine, which he continued to hold until 1836. At this time he gave up the active duties of the office, and was chosen Professor *Emeritus*. His writings are numerous, and all his publications show great wisdom as well as literary culture. During a period of more than half a century, he was a frequent contributor to the pages of "The New-England Journal of Medicine and Surgery," and of "The Boston Medical and Surgical Journal." His death took place on August 27, 1867.

A charter for a hospital was granted by the Legislature, February 25, 1811, containing a liber-

al gift made on the condition that \$100,000 more should be subscribed by individuals. Besides giving the Province House, the official residence of the provincial Governors, for this object, the State helped along the matter in various ways. By a special Resolve it was provided that the stone for the building should be hammered by the convicts in the State Prison at Charlestown. The work thus done is estimated at more than \$30,000. The institution was opened in the autumn of 1821; though the McLean Asylum for the treatment of the Insane, under the same board of managers, was in operation several years before this time.

The Massachusetts General Hospital is the oldest institution of its kind in New England, and for the high professional character of its officers, and for its efficient management is second to none in the country. The community owes a deep debt of gratitude not only to the whole-souled men who endowed the hospital with their means, but also to the accomplished physicians and surgeons who devoted their time and thought to the common object. From the outset its growth has been steady and sure; and it stands to-day an abiding monument to the noble purposes of the men of science, as well as the men of wealth, who established it.

Two of the Governors of Massachusetts, John Brooks and William Eustis, were physicians, and both early fellows of this Society. They each had served throughout the Revolution, and rendered important services to their country, the one as a field officer and the other as a surgeon. In after-

life both of them occupying political positions of usefulness and importance, they enjoyed at the same time a wide professional influence. I do not forget that the second office in the gift of the people of this Commonwealth has been filled by three members of this learned association. David Cobb, an officer of the Revolution, and subsequently a judge, who told the mob at Taunton, during the Shays rebellion, that he would sit as a judge or die as a general; Henry Halsey Childs, and Elisha Huntington,—all these have been Lieutenant-Governors of the State.

The first American seaman treated by the United States Government was cared for in Boston Harbor by Dr. Thomas Welsh, a charter member of this Society. The first United States Marine Hospital was built at Charlestown in the year 1803, and its first physician was Dr. Charles Jarvis, another charter member. The first enactment in this country legalizing the study of practical anatomy was passed February 28, 1831, by the General Court of this Commonwealth. For a long time Massachusetts was the only State in the Union, where a liberal law threw its protection over this important branch of study; and it was brought about entirely by fellows of the Medical Society.

The greatest boon to the human race, since the invention of printing, has been, unquestionably, the discovery of the anæsthetic properties of sulphuric ether: all Christendom owes a debt of lasting gratitude for the knowledge of this incalculable blessing. Scarcely a generation has passed

since the great fact was demonstrated at the Massachusetts General Hospital in Boston, that the acutest sensations of physical suffering under the surgeon's knife, by this discovery may be changed into the innocent dreams of the weary sleeper. By means of it the young wife awakens from her slumbers, and finds that unconsciously she is a mother. Through its power, life has been saved and pain prevented; and it is due to the memory of the discoverer that on this occasion we should recognize his claims as a public benefactor. The surgeons of the Hospital, all members of this Society, stood sponsors to the great discovery; and by their prudent and judicious action hastened the day when the use of ether, as an anæsthetic agent, has become well-nigh universal. Mr. Bowditch, in his History of the institution, gives a full account of the introduction of its use, together with a detailed statement of the controversy connected with it.

There have been so many distinguished fellows of the Massachusetts Medical Society, worthy to be mentioned on this occasion, that I find it difficult to discriminate; and I pass them over in silence. Their names are so conspicuous that they will readily suggest themselves; but I should be doing an injustice to my own feelings, if I did not publicly recognize the labors which the late Dr. George Derby rendered to the military service of his country, as well as to the cause of sanitary science in his native State. As his army comrade through several campaigns, I have a right to speak

of him as a man and a surgeon, in the warmest terms which friendship can prompt. And for the same reasons I cannot withhold a tribute to the memory of the late Dr. George Alexander Otis, of Springfield, who left the State as Surgeon of the 27th Massachusetts Volunteers; though he afterward received a commission as surgeon in the regular army, where he remained until his death, February 23, 1881. His contributions to "The Medical and Surgical History of the War of the Rebellion" have placed him among the prominent writers of the profession.

In the late War for the Union, the members of the medical profession not alone of Massachusetts, but of the whole country, North and South, Federal and Confederate, Blue and Grey, performed such noble services in the cause of humanity that I am constrained to refer to them in this address. During a long service I am proud to say that I have never known an instance where a sick or wounded soldier, friend or foe, did not receive from the surgeon the best professional skill available at the time, whether on the one side or the other of the contending armies. In the presence of pain and suffering all hostility was buried. Only those surgeons who have served in the field are aware of the hardships in the treatment of medical and surgical cases during a campaign. I do not allude now to personal privations or inconveniences which are shared nearly alike by all, but I refer to the want of many things considered necessary in civil life for the care of the sick, and always es-

sential to their comfort. There are physicians in this audience who have been called upon to treat, during the bad weather of an inclement season, miles away from any hospital, soldiers lying on the ground and suffering with all the symptoms of acute disease. There are those here present who have been obliged to perform severe operations of surgery, in the dark hours of the night, under the broad canopy of the open heavens, by the faint glimmer of smoky candles and dingy lanterns, on an extemporized table, or perhaps with no table at all.

The names cut on the marble tablets in the adjoining hall bear witness to the patriotism of many a member of this Society, who sealed by death his devotion to the country. In common with all classes and callings the physicians of the loyal States hastened to the rescue when the National Government was threatened, and proffered their professional services. The value of the medical literature, growing out of these services, is acknowledged throughout the civilized world.

The following medical officers from this State were slain in action, while in the line of their duty: —Samuel Foster Haven, Jr., Surgeon 15th Massachusetts Volunteers, was killed at Fredericksburg, Virginia, December 13, 1862; Albert Asaph Kendall, Assistant-surgeon 12th Massachusetts Volunteers, and Edward Hutchinson Robbins Revere, Assistant-surgeon 20th Massachusetts Volunteers, both were killed at the battle of Antietam, Maryland, September 17, 1862; Franklin Lambert Hunt, Assistant-surgeon 27th Massachusetts Volunteers,

shot down by *guerrillas* in ambush, near Washington, North Carolina, November 18, 1862; and John Edward Hill, Assistant-surgeon 19th Massachusetts Volunteers, died in the hospital at Georgetown, D. C., September 11, 1862, of wounds received a short time previously.

The following medical officers in Massachusetts regiments died, during their term of service, from disease contracted while in the army:—Neil K Gunn, Assistant-surgeon 1st Massachusetts Volunteers, June 2, 1863, at Falmouth, Virginia; William Henry Heath, Surgeon, July 24, 1862, at Chattanooga, Tennessee, and James Wightman, Assistant-surgeon, June 15, 1863, at Acquia Landing, Virginia, both of the 2d Massachusetts Volunteers; William Webster Claflin, Assistant-surgeon 13th Massachusetts Volunteers, July 25, 1864, at Hudson, in this State; Eben Kimball Sanborn, Surgeon 31st Massachusetts Volunteers, April 23, 1862, at Ship Island, Mississippi; Ariel Ivers Cummings, Surgeon 42d Massachusetts Volunteer Militia, September 9, 1863, at Hempstead, Texas; Robert Ware, Surgeon 44th Massachusetts Volunteer Militia, April 10, 1863, at Newbern, North Carolina; Nathaniel Wells French, Assistant-surgeon 50th Massachusetts Volunteer Militia, April 21, 1863, at Baton Rouge, Louisiana; and Dixi Crosby Hoyt, Assistant-surgeon 2d Regiment Heavy Artillery, November 1, 1864, at Newbern, North Carolina.

Dr. Luther V Bell, a distinguished fellow of this Society, died February 11, 1862, in his tent at

Camp Baker, two miles from Budd's Ferry, Maryland, while holding a medical commission from the United States. Dr. Lucius Manlius Sargent, Jr., who entered the military service of his country as Surgeon of the 2d Massachusetts Volunteers, was killed in the Virginia campaign, December 9, 1864, while leading a charge of the 1st Massachusetts Cavalry, of which regiment he was the Lieutenant-colonel. He was a skilful surgeon as well as an intrepid officer; in his death the Society lost a valuable member, and the State a gallant soldier.

I might mention other physicians, fellows of this Society, who since the war have died from disease contracted while in the army. They are as much the victims of their patriotic service, as if they had been killed in the heat of battle. My friend and classmate, Dr. Anson Parker Hooker, Surgeon of the 26th Massachusetts Volunteers, and subsequently the Assistant Surgeon-general of the Commonwealth, died, December 31, 1873, from the effects of malaria received while with his regiment. Dr. Jonah Franklin Dyer, Surgeon of the 19th Massachusetts Volunteers, died at Gloucester, February 9, 1879; and he is another fellow of this Society who, from disease contracted in the service, laid down his life for his country, years after the war was over, as truly as if he had died in camp.

The Massachusetts Medical Society is now the oldest state organization in the country, of a similar character, that has held its meetings continuously and regularly from the date of its incor-

poration. Since its foundation it has borne on its rolls the names of 3,700 persons; and to-day its membership includes 1,350 physicians coming from all parts of the Commonwealth. These members represent every section of the State, and their influence on one another is as immense as it is incalculable. The average attendance at the annual meetings of late years is not far from 750 members; these meetings last through two days, and with few exceptions have been held in Boston.

The charter of the New Jersey Medical Society antedates that of this Society by some years, but there have been breaks in its regular line of descent. During the Revolution there was a suspension of its meetings from the year 1775 to 1781, which was due to the interruption of the war; and then again from the year 1795 to 1807, this time owing to a general anæmic condition of interest, on the part of its members.

We now stand on the dividing line between two centuries,—the one that is passed, and the other just beginning,—and we can look forward only so far as the light of the past illuminates the vision. We see enough, however, to know that new ideas in the profession will be established, and new methods adopted. The physician of the coming period will have a broader knowledge of preventive medicine. The laws of infection and contagion will be better known, and the daily conditions of health and disease more thoroughly understood. The subtle connection between cause and effect will be more accurately defined; and what is now

obscure will be made clear. The great fact is to be emphasized that everything in this life is related to what has gone before, and that we are what we are in consequence of antecedent circumstances. We may approach even to the curtain which nature drops over all vital action, but there we must stop; though in other directions the finger of Discovery points down endless paths for investigation. Yet with all the knowledge that the human intellect can master, the great problem of living organism will be as far from solution as it is to-day. Groping in the dark in respect to first causes, we must confess that life is an impenetrable mystery,—that it is something more than chemical action, and something beyond protoplastic development. For our purpose it is enough to know that the science of medicine will continue to the last point of measured duration; and, like a planet plunging on through the immensity of space, in its untiring and unending course, it will shed its rays of light and consolation wherever atoms of humanity are found.

CORRECTION,—page 33, line 6.

For the last sentence of the first paragraph, *read*: “Hoar was the first president who was a graduate of the institution, but Rogers was an earlier graduate who became president afterward.”

A P P E N D I X .

THE following letter,—written by a distinguished scholar, whose knowledge of the native dialects of the country is unsurpassed,—has an important bearing on the diagnosis of the disease, mentioned in page 12 of the preceding Address. It furnishes, from a philological stand-point, an interesting contribution to the discussion of the subject.

Hartford, June 25, 1881.

MY DEAR DR. GREEN:

Thanks for a copy of your capital Centennial Address,—which I have just now finished reading, with much interest.

I see that you incline to the belief that the “prodigious pestilence” which made room for the Pilgrims at Plymouth, was the small-pox, and not the yellow-fever. I have not a copy of Winslow’s “Good Newes” within reach this evening, and I do not recollect his statement that you cite, that the same disease prevailed as late as November, 1622. This statement may be conclusive against yellow-fever. Roger Williams, in “Key,” ch. xxxi. shows, however, that the Indians had distinct names for the “great plague” and “the [small] pox.” I have indicated, in my edition of the Key, p. 211, the composition of the name for the “plague,” which agrees exactly with the description of it that the Indians gave to Gookin. “*Wesauashaúi*,” which Williams translates, “He hath the plague,” literally signifies “he is *badly* yellow,” and the name for the disease itself, *wesauashaúonck*, is “a bad yellowing” or “being badly yellow.” I am not quite certain of the signification of the Indian name for the small-pox, *Mamaskishaúonck*, but this name is still in use—under various dialectic variations—by several, perhaps by all Algonkin tribes. For the Narraganset *mamaskishaúi* “he has the small-pox,” the Chippeways have

omamakisi, and for the name of the disease, *mamakisi-win*. (The *toad*, by the way, is named by the Chippeways, *omakiki*, probably from his warty skin.) In the western Cree, the verb becomes *omiki-u*, and the noun, *omikiwin*,—which is used as a name for *Psora*, as well as for the small-pox, and also enters into the composition of the name of *leprosy*, and is nearly related to the names for *measles* and *scarlatina*. In the western dialects, the derivation of these names seems plainly enough to be from a root denoting *redness*; and if so, the Narraganset (and Massachusetts) name for the small-pox must have been derived from that of some earlier-known disease, which signified “*redness of skin*” or “*eruption*” (*Psora?*), by intensive reduplication and the suffix denoting *badness*,—so as to give the meaning of a “*very great bad redness*” or cutaneous eruption.

As I have said, Roger Williams shows that the small-pox and “the great plague,” were distinguished by the Indians of New England by different names. They told him, 1637-43, of “the last pox” and “the great [literally, the *last*] plague”—and diagnosed the two as well as they could do by single words: “the late great eruption” and “the late great yellowing, or yellowness.” Eliot evidently identified the “yellowing” with a “fever,”—for while he uses *wesaušhāw̄n̄k* for “pestilence,” in Psalm xci. 3. 6, and Luke xxi. 11, and for “plague” (rarely) as in Luke vii. 21, he also uses the verb *wesōshau*, for “she was sick of a fever,” in Matt. viii. 14, Mark i. 30.

One word more: we had in Connecticut, I think, an earlier autopsy than yours of 1674. In March, 166 $\frac{2}{3}$, the Gen. Court allowed Mr. Bryan Rossetter—at that date the only regularly educated physician and surgeon within many miles of Hartford—payment “in reference to opening Kellie’s child,” and for other professional services. See Conn. Col. Records, i. 396. It is not, I admit, absolutely certain, that Kelley’s child died *before* the opening.

Very truly yours,

J. H. TRUMBULL.

P. S. June 27th. Looking at Bradford’s History, this morning, I see that he observes (p. 326) that the Indians were more afraid of the *small-pox* than of the *plague*. Winslow does not identify the disease prevalent in Massachusetts in 1622, with the plague of 1617-18,—though he says (on hearsay, of course) that it was very like it, if not the same.

JANE HAWKINS, who acted as midwife at the delivery of Mary Dyer's monstrosity, mentioned in page 27, was herself a physician of some notoriety. According to Governor Winthrop,—

“she used to give young women oil of mandrakes and other stuff to cause conception; and she grew into great suspicion to be a witch, for it was credibly reported, that, when she gave any medicines (for she practised physic.) she would ask the party, if she did believe, she could help her.”—(“The History of New England,” i. 316.)

Thomas Welde, in “A Short Story,” etc. (London, 1644), says that she was “notorious for familiarity with the devill.”—(Page 44.) Her reputation in the community was anything but good. She was looked upon as a witch, and for that reason greatly feared by her neighbors. Her case was considered at the session of the General Court, beginning March 12, 1637-8, when it is recorded that—

“Jane Hawkins the wife of Richrd Hawkins had liberty till the beginning of the third m^o called May, & the magistrates (if shee did not depart before) to dispose of her, & in the meane time shee is not to meddle in surgery, or physick, drinks, or oyles, nor to question matters of religion except wth the elders for satisfaction.”—(General Court Records, i. 219.)

The effect of this order is not known; but some years later summary steps were taken to get rid of her without much previous notice. At the session of the General Court, beginning June 2, 1641, it was voted that—

“Jane Hawkins is enioyned to depart away tomorrow morning, & not to returne againe hither upon paine of severe whipping, & such other punishment, as the Court shall thinke meete. & her sonnes stand bound in 20^l. to carry her away according to order.”—(General Court Records, i. 309.)



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Annex

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Annex

